

INDIA FOR THE MOTORIST



# INDIA FOR THE MOTORIST

A GUIDE FOR THE TOURIST AND RESIDENT

BY

CHARLES WATNEY

AND

MRS HERBERT LLOYD

EDITED BY

LORD MONTAGU

WITH SPECIAL ROUTE MAPS AND DESCRIPTIONS

LONDON

"THE CAR ILLUSTRATED," LTD.

62, Pall Mall, S.W.

1913





## INTRODUCTION

**M**OTORING in India is already becoming not only one of the most attractive pastimes of the leisured tourist, but an inestimable advantage to the work of the official and business man. It will, there is reason to believe, acquire in the future a measure of popularity of which few have any conception. It is incomparably the best and the most agreeable way of seeing the country. Even now the visitor who makes general use of the railway is obliged, here and there, to have recourse to the motor as an indispensable adjunct to his travelling. It affords a really first-hand knowledge of the native and his habits. It is infinitely more agreeable even in the heat than the railway train. It permits rapid and exhaustive sight-seeing. It affords the impression of real novelty in touring. It is invaluable in a country where the ordinary means of road locomotion are hopelessly backward, where even fast trains are few, and, indeed, trains of any kind relatively

restricted in number. The motorist is, too, certain of his weather. And, finally, the expense is not exceptional, for the resident finds it cheaper than keeping horses; nor is it unduly onerous to the visitor, particularly if two or three tour together, under an arrangement which permits of a joint partition of the outlay.

Unfortunately, there has hitherto existed no small, handy book calculated to afford much real assistance and guidance to the motoring tourist or resident, or to those who would like to tour if they rightly knew the conditions under which this could be effected. It cannot be too clearly understood that it is not vital to own and drive a car oneself if one wishes to tour in India. Cars can always be hired, and firms are wont to undertake the most comprehensive arrangements for customers. Personal worry and trouble over details of tour-planning are quite unnecessary, though patience and self-control are advantageous qualities in meeting the inevitable little hitches which attend any motor tour, and particularly motor touring in an Oriental country.

In the following pages aspects of motor touring are comprehensively treated in a fashion which may prove of value to the tourist. There is no attempt at attenuation of difficulties, no wish to paint the prospect in too glowing colours. Motor-ing in India is a most enjoyable pastime, but there do exist minor drawbacks, in the shape of restricted

accommodation and primitive means of entertainment; of occasional rough stretches of road; of unbridged rivers; of very limited opportunities of acquiring petrol, oil, etc., and of effecting repairs; of sparsely scattered railways and of necessarily few telegraphic facilities—few, that is, compared with the vast stretches of country. But all these drawbacks are as nothing compared with the supreme pleasures derivable from motoring, and most of the drawbacks can be either diminished or removed by foresight and forethought. The chief point is to recollect that India is a land of immense distances—inconceivable to those who only know the restricted stretches of Europe.

Finally, the book makes no claim to be exhaustive. There are many good roads in India where the motor can go, roads which yet find no mention here. For the most part, no tourist needs to use them; for the rest, he can easily learn, in passing through the towns and cities, the best side-runs to objects of interest which will well repay any trouble he may take. But the book does give guidance enough to anyone wishing to see most places worth seeing; it does outline tours capable of affording entertainment for many weeks; and it does try to be helpful about what it recommends, instead of affording useless generalizations as to what it cannot enter into in detail.

Still, like every other guide-book, it is capable of improvement, and will be improved, and the

compilers will keenly appreciate the courtesy of any readers who may tour in India and subsequently forward them either criticisms of what is here published, or fresh information and guidance as to excellent routes not touched at all. Their own object will be more than attained if they can popularize motoring in what is one of the most interesting and delightful countries in the world.

LONDON,

*February 1 1909*

KEY MAP OF THE ROUTES.



# CONTENTS

## PART I

	PAGE
INTRODUCTION (KEY MAP) - - - -	ix
TIME FOR MOTORING - - - -	1
THE BEST TYPE OF CAR FOR TOURING - -	3
TRANSPORT OF CARS—PASSENGER RATES TO INDIA	5
CUSTOMS - - - -	9
LANDING OF CARS - - - -	10
LICENCES AND NUMBER PLATES - - -	11
SPEED LIMITS AND RULE OF THE ROAD -	12
DIK BUNGALOWS - - - -	16
HOTELS - - - -	22
RAILWAY TRANSPORT OF CARS - - -	26
THE CARRIAGE OF PETROL - - - -	29
MOTOR ACCESSORIES AND REPAIRS - -	35
FOOD AND OUTFIT - - - -	40
NATIVE SERVANTS - - - -	44
MAPS - - - -	46
TELEGRAPH RATES - - - -	48
POSTAL RATES - - - -	49
COINAGE - - - -	49
PHRASES FOR THE MOTORIST - - - -	51
HANDY WORDS - - - -	56
THE CAMERA ON THE CAR - - - -	57
HINTS TO SPORTSMEN - - - -	58

## CONTENTS

## PART II

	PAGE
THE ROADS IN INDIA - - -	60
BOMBAY PRESIDENCY - - -	66
BENGAL PRESIDENCY - - -	70
MADRAS PRESIDENCY AND MYSORE - -	72
THE UNITED PROVINCES - - -	74
THE CENTRAL PROVINCES - - -	75
EASTERN BENGAL AND ASSAM - - -	76
THE PUNJAB - - -	77
NORTH-WEST FRONTIER PROVINCE - -	78
HYDERABAD - - -	79
CASHMERE - - -	80
TRAVANCORE - - -	80
DETAILED ROUTE MAPS - - -	81
THE GRAND TRUNK ROUTE - - -	82
HOTELS AND DAK BUNGALOWS - - -	83
ROADS IN INDIA - - -	85
GOVERNMENT TELEGRAPH OFFICES ALONG THE ROUTES - - -	86
DISTRICTS TRAVERSED WITH CHIEF LOCAL CIVIL AUTHORITIES - - -	88
BOMBAY TO THANA - - -	92
THANA TO IGATPURI - - -	94
IGATPURI TO DHULIA - - -	96
DHULIA TO KHAL GHÁT - - -	98
KHAL GHÁT TO MAKSI - - -	100
MAKSI TO GOONA - - -	102
GOONA TO GWALIOR - - -	104
GWALIOR TO AGRA - - -	106
AGRA TO DELHI - - -	108
DELHI TO UMBALLA - - -	110
UMBALLA TO SIMLA, VIA KALKA - -	112



# CONTENTS

xi

## DETAILED ROUTE MAPS (*continued*)

PAGE

UMBALLA TO LUDHIANA - - -	114
LUDHIANA TO LAHORE - - -	116
LAHORE TO JHELM - - -	118
JHELM TO PESHAWAR - - -	120
PESHAWAR TO LUNDI KHOTAL - - -	122
RAWAL PINDI TO SRINAGAR - - -	124
DELHI TO CAWNPORE - - -	126
AGRA TO BHONGAON - - -	126
CAWNPORE TO LUCKNOW - - -	128
CAWNPORE TO ALLAHABAD - - -	128
ALLAHABAD TO BENARES - - -	130
BENARES TO DEHRI-ON-SONE - - -	132
DEHRI-ON-SONE TO GYA - - -	134
GYA TO BURHI - - -	134
BURHI TO ASANSOL - - -	136
BURHI TO RANCHI - - -	136
ASANSOL TO CALCUTIA - - -	138
AGRA TO JAIPUR - - -	140
GWALIOR TO SAUGOR, VIA JHANSI - - -	142
SAUGOR TO NAGPUR, VIA CHHINDWARA - - -	144
NAGPUR TO JUBBULPORE - - -	146
JUBBULPORE TO ALLAHABAD - - -	148
NAGPUR TO HYDERABAD - - -	150
CALCUTTA TO PURI - - -	152
CALCUTTA AND ITS ENVIRONS - - -	154
CALCUTTA TO DARJEELING - - -	156
BOMBAY TO POONA - - -	160
THE APPROACHES TO POONA - - -	162
POONA TO KOLHAPUR - - -	164
POONA—SURUL—MAHABLESHWAR - - -	166
SURUL—MAHABLESHWAR—SATARA - - -	168
KOLHAPUR TO HARIHAR - - -	172
HARIHAR TO BANGALORE - - -	174

DETAILED ROUTE MAPS (*continued*)

POONA TO MALEGAON VIA AURUNGABAD	-	177
POONA TO BIJAPUR	- - -	180
BIJAPUR TO BELLARY	- - -	182
BELLARY TO BANGALORE	- - -	184
BELGAUM TO KARWAR	- - -	186
SIRSI—SHIMOGA—CHITALDROOG	- - -	188
SHIMOGA TO MANGALORE	- - -	190
CHIKMAGALUR TO BANGALORE VIA HASSAN	- - -	192
MADRAS TO BANGALORE	- - -	194
BANGALORE TO MYSORE AND OOTACAMUND	- - -	199
MYSORE TO CALICUT	- - -	198
MADRAS TO ONGOLE	- - -	200
ONGOLE TO HYDERABAD	- - -	202
MADRAS AND ITS ENVIRONS	- - -	204
KURNOOL TO CHITTOOR	- - -	206
BANGALORE TO COIMBATORE	- - -	208
CALICUT TO TRICHINOPOLY	- - -	210
MADRAS TO TANJORE VIA TRICHINOPOLY	- - -	212
TRICHINOPOLY—MADURA—TUTICORIN	- - -	214
DINDIGUL—MADURA—TRIVANDRUM	- - -	216
THE UNITED PROVINCES	- - -	218
CALCUTTA TO ASSAM	- - -	220
BURMA	- - -	230
CEYLON	- - -	232
APPENDIX A	- - -	234
APPENDIX B	- - -	236
APPENDIX C	- - -	239
APPENDIX D	- - -	241
APPENDIX E	- - -	242
APPENDIX F	- - -	244

# INDIA FOR THE MOTORIST

## PART I

### Time for Motoring

THE best time to motor in India is from November to March. October is almost universally a very hot and very oppressive month. In April it begins to get hot—in places very hot. As a rule, the ordinary winter noon temperature ranges from  $70^{\circ}$  to a maximum of about  $85^{\circ}$ . At the same time, motoring *can* be done in the warmer months, though not with the same measure of comfort, since the heat is often excessive between ten o'clock in the morning and four o'clock in the afternoon. Before ten and after four it is very pleasant and agreeable, though the temperature will even then vary from  $80^{\circ}$  to  $90^{\circ}$ .

Owners of motor-cars use them in India all the year round, and one meets them on the road at midday when the temperature is  $130^{\circ}$  to  $140^{\circ}$  in the sun. Of course, if one is *obliged* to travel, then it is by far the pleasantest form of locomotion, but otherwise it is not to be recommended.

In the winter months the heat is often great during the day, but the nights are, in contrast to the summer, very cool and pleasant. In many places, particularly in the higher altitudes, frost is common. Snow falls on the hills. Apart from the monsoon periods, which vary in different districts and are often erratic, but prevail usually from about June to September, there is practically unbroken fine weather. Plans can be made with the certainty of accomplishment.

For the benefit of those who fear the Red Sea journey, which gives a foretaste and indication of the Indian heat, the average monthly shade temperature in the Red Sea is appended. It is taken from the records of the meteorological coast stations:

	Suez, 30° N.	25° N.	20° N.	15° N.	Perim.	Aden.
January ... ..	53·8	64·9	72·5	77·5	79·3	75·9
February ... ..	55·7	66·6	72·4	77·3	79·8	76·8
March ... ..	61·6	71·1	75·8	79·3	81·4	79·1
April ... ..	67·5	75·9	80·7	83·1	85·4	82·7
May ... ..	73·8	79·2	83·5	87·6	88·9	85·8
June ... ..	78·4	83·8	86·0	91·4	91·6	87·6
July ... ..	81·2	84·6	87·6	93·9	93·0	85·9
August ... ..	81·3	84·9	88·6	94·3	93·3	85·0
September ... ..	77·3	83·8	86·8	91·4	92·0	87·0
October ... ..	73·1	79·2	83·5	89·2	87·7	82·8
November ... ..	63·4	74·1	80·3	84·2	82·3	78·5
December ... ..	56·9	68·0	76·9	80·6	80·2	76·6

*Always* "respect the sun." Ordinary care will, however, safeguard the traveller as far as India, where sun hats of all kinds are best obtainable.

### **The Best Type of Car for Touring**

THE best type of car for touring should not exceed 30 h.p., which is adequate for everything, and saves petrol; indeed, many people prefer one of about 20 h.p. It should be solidly built. It should not possess a long wheel base, as in the hills many roads are tortuous and narrow. The body should be high and well hung. It should be fitted with a Cape-cart hood to minimize the rays of the sun. Powerful brakes are necessary, as sudden stoppages are inevitable. Preferably the car should be a well-known standard make, as spare parts are the more easily obtainable. The tyres should be of normal size—Dunlop and Palmer Cord are the best spoken of in India; the former is the most frequent, and therefore the most readily obtainable. Continentals and Michelins—more especially the former—are used by some motorists; other makes are but little stocked. Vulcanizing and retreading, particularly the former, are now undertaken by all the leading motor firms. Owing to the heat vulcanizing is not always a success, but the Harvey-Frost system is well spoken of. Motorists should carry their own outfit. Anti-skids are often used through mistaken ideas of economy, but there is no actual need for them, save that they greatly diminish the risk of punctures. Grooved, non-slipping tyres give all the protection against skidding that may be desired, and they wear well.

Magnetos should be used. Coils get out of

adjustment by  $\frac{1}{8}$  inch in less than a month, and celluloid cells crack, while accumulators with pitch are useless. Dry cells work well in the dry weather, but are useless in the rain. Many cars carry no batteries, starting first turn on a H. T. magneto. This is particularly the case in the dry central plains. Accumulators can, of course, as a rule, only be recharged in the few large cities; the process is often expensive, and the result bad. Some persons successfully use Boron Primary cells.

As night falls suddenly and the motorist is certain to be "caught out" sooner or later, powerful head lights are vital.

It is not always easy to hire a car, second-hand or otherwise, for touring. Many firms see no profit in it, and prefer to sell outright to the tourist, and then resell the car second-hand for him when he leaves the country. Even second-hand cars do not, however, sell well. Still, cars can be hired, only inquiries must be comprehensive and made well before the arrival of the would-be motorist. The rates would probably be slightly more than those prevailing at home, only the running expenses would be very much higher, and the actual distance to be covered in one day restricted to, say, one hundred miles. Of course, for less ambitious runs, such as are popular in Ceylon, smaller cars can easily be hired at much reduced rates. Motorists desiring to hire cars should initially apply to the firms mentioned in the section "Motor Accessories and Repairs." The table appended, issued by a leading Madras firm, will serve as an indication for the

others; cheaper terms are quoted for lengthy periods.

Per Day of Eight Hours, or Actual Travelling Distances not exceeding 100 Miles.	Cars to Seat Four	Cars de Luxe, to Seat Five
	Rs. A.	Rs. A.
One day's hire ... ..	100 0	125 0
Two days' " ... ..	190 0	235 0
Three " " ... ..	275 0	340 0
Four " " ... ..	355 0	440 0
Five " " ... ..	430 0	535 0
Six " " ... ..	500 0	625 0
Seven " " ... ..	565 0	700 0
Every further day . . . .	75 0	100 0

The charges include the services of a driver, petrol, and maintenance, but not the driver's board and lodging

### Transport of Cars

THE motorist will therefore best leave England not earlier than the middle of October. The journey takes three weeks or a little more to Bombay, about the same time to Colombo (Ceylon), two or three more days to Madras, and about five weeks to arrive in Calcutta by sea. This presupposes relatively fast and direct or at least interworking boats.

The return journey can be made any time in March—a pleasant month for the sea voyage.

The car must be packed carefully, and should for this purpose be placed in the hands of expert shipping and forwarding agents. It should also be insured, and this can be easily arranged through the Car Insurance Department, 168, Piccadilly.

The well-known firm of Langstaff, Ehrenberg and Pollak adopts the same arrangements as it has already with ports in the United States for American travellers to the Continent and England—viz., that waterproof packing-cases are constructed in sections and bolted with screws, whereby the cars can be taken out quite easily at the port of arrival and the cases used for the return journey.

As to the cost, the following figures may be given for ordinary touring cars of standard type, but they would vary somewhat in individual cases:

(a) Packing in a sectional case with bolts and screws, about £12 per car.

Storage from the day of arrival till reshipment, about 5s. per month.

Ordinary case for outward journey, about £7.

(b) Freight from London plus dock charges by the steamers of the British-India Steam Navigation Co., 9, Throgmorton Avenue:

To Colombo (Ceylon), Madras, Calcutta, Bombay, £20 per car.

To Rangoon, £24 per car.

By P. and O. steamers, London, including dock charges:

To Colombo and Bombay, £24 per car.

To Calcutta, £20 per car.

(c) Insurance, value about £1,000, £5 per car.

The return journeys under ordinary circumstances will cost about the same.

As it may happen that a traveller should leave India by another port than the one of arrival, it



could, of course, be arranged to have the sectional case transferred to another port, where the packing could be effected.

As to the detailed work of car-packing, it may be stated that on arrival at the packing-shed all the petrol is drained off, the accumulators emptied and refilled with water, the springs wedged to stop vibration, and the glass screens and lamps removed and packed in loose, well-padded crates, which are usually placed under the chassis. Finally, all brass, nickel, or bright metal parts are smeared with, preferably, a composition of oil and tallow, vaseline having somewhat fallen into disuse owing to spotting. The car is then run on to the flooring of the case, its weight being taken by thick "chocks" or supports placed under the axles or bosses. The sides of the cases are nailed up, and heavy deals placed over the footboard and both ends of the car to make it rigid, the ends and the top of the case being nailed or bolted up. The package is then marked, weighed, and carted to docks, the whole process being completed, if necessary, in twelve hours.

Complaints have been made regarding the damaged condition of Cape-hoods which have been exported as used, so to prevent damage being done to the cloth by the melting of the rubber composition sheets of paper are now placed between each fold.

The following agents in London will attend to the packing and loading of cars, thus relieving the owner of all responsibility:

Messrs. Thos. Cook and Son, Ludgate Circus,  
E.C.

Messrs. Henderson, Maccall and Co., 95, Leadenhall Street, E.C.

Messrs. Gellatly, Hankey and Co., 51, Pall Mall, S.W., and Dock House, Billiter Street, E.C.

British-India Steamship Co., 9, Throgmorton Avenue, E.C.

Messrs. Langstaff, Ehrenberg and Pollak, 17-18, Basinghall Street, E.C.

Messrs. Henry Johnson, Sons, Ltd., 35, Great Tower Street.

Messrs. Robert Park and Co., 91-93, Clerkenwell Road, London.

It is best to consign the cars for landing and clearing to specified agents in the chief Indian ports. They will do the work expeditiously and well, and the cost will not be excessive. The following can be recommended :

Bombay : Messrs. Thos. Cook and Son, 13, Esplanade Road.

Messrs. Grindley, Groom and Co.

Calcutta : The Russa Engineering Works, Ltd.

Messrs. Thos. Cook and Son, 9, Old Court House Street.

Messrs. Mackenzie, Lyall and Co.

Madras : Messrs. Oakes and Co., Mount Road.

Colombo : Messrs. Walker and Son.

Messrs. Thos. Cook and Son, Victoria Arcade.

Messrs. E. Creasy and Co.

Rangoon : Messrs. Thos. Cook and Son, 5, Phayre Street.

Any of these firms will undertake to repack and reship the car at the end of the tour for transport to Europe. Most London shipping firms have, too, their own agents in India.

### Customs

MOTOR-CARS, excepting those designed to carry goods and containing a prime mover, which are free, are assessed to Customs duty at 5 per cent. *ad valorem* on importation into India, under Article 25 of Schedule IV. of the Indian Tariff Act, 1894. When a car is subsequently taken out of the country, a refund of seven-eighths of the duty paid on importation is granted, under Section 42 of the Sea Customs Act, 1878, provided the re-export be made within two years from the date of importation and the car be identified to the satisfaction of the Customs collector at the port of export.

It may be added that if the value of the car be much understated the Government may claim it at the price mentioned.

The personal effects of visitors and tourists are admitted free, though spare tyres and parts of cars would of course be subject to the usual duty (Appendix A).

### Landing of Cars

IT is necessary to allow two or three days for landing, clearing, and unpacking a car. In Bombay the car can be landed direct on to the dock wharf; in Calcutta, Madras, and Colombo, it must first be placed on a lighter. Madras has a very bad harbour, and rough weather may easily delay the landing. (For good landing firms see p. 8.)

In Bombay the work is done expeditiously. The process of landing occupies about an hour, as the packages generally weigh over  $1\frac{1}{2}$  tons, and are discharged by ship's gear. Cars are charged by the dock authorities under the heading of machinery. The rate for cars weighing over  $1\frac{1}{2}$  tons and up to 5 tons is R. 1. 14. 0 per ton. If they are over  $\frac{1}{2}$  ton and do not exceed  $1\frac{1}{2}$  tons, the charge is R. 1. 10. 0 per ton. The same charges are again levied when the car is re-exported. Landing firms charge from Rs. 50 to 100 inclusive.

In Calcutta it costs to land an ordinary car for a private individual about Rs. 60 to Rs. 100, for taking delivery from the jetties, clearing and unpacking, cleaning and seeing that it is in running order. For small cars the charge is less. The actual landing charge is 18s.

In Colombo it will cost about £4 to land and clear a car.

In Madras Messrs. Oakes and Co. will clear and forward from the dock any car, whether imported through them or not, and

## LICENCES AND NUMBER PLATES 11

test the same before despatch at the following rates:

Cars up to 14 nominal h.p., landing and boat hire, Rs. 10; opening and examining at Customs, Rs. 2; clearing through Customs, Rs. 10; cartage to garage or railway-station, Rs. 10.

Cars above 14 nominal h.p., landing and boat hire, Rs. 12; opening and examining at Customs, Rs. 3; clearing through Customs, Rs. 15; cartage to garage or railway-station, Rs. 12. Harbour dues are charged according to value—Rs. 15 on cars of the value of Rs. 6,000 or less, and Rs. 30 on cars of greater value.

### Licences and Number Plates

NO car can be used unless registered at the chief police-station. The cost—Bombay is typical of the rest—is Rs. 16, but re-registration is not essential in different parts of the country. If it is, however, accomplished, no fee is chargeable. The owner's name and address is taken, and number plates of the size usually in vogue in Europe are supplied to him at a cost of R. 1. 4. 0 per set of two. These numbers are valid throughout the Presidency and in most parts of India. Reciprocity extends in Bombay to numbers issued in other parts of the country. Registration forms to be filled in by the applicant require the customary information as to the make of the car. The police pay special attention to the brakes and smoky exhaust.

Driving licences are issued by the police, who usually require—

Full name of applicant.

Postal address of residence of applicant.

Whether applicant is over eighteen years of age.

Whether applicant holds, or has at any time previously held, a licence.

Particulars of any licence which applicant holds, or which he has previously held.

Particulars of any endorsement on any licence which applicant holds, or which he has previously held.

The cost of such licence is, in Bombay, Rs. 2, and elsewhere much the same; the authorization holds good for twelve months, and must be renewed.

There are over 1,500 registered motor-car owners in the Bombay Presidency.

### **Speed Limits and Rule of the Road**

**S**PEED limits, usually about fifteen or more miles an hour, exist in most big cities, but there is no effort on the part of the police arbitrarily to enforce them, provided there be no very fast or reckless driving. Consequently, they are disregarded for all practical purposes. In the country there is no limit at all, though here and there, near and in villages, reduction of speed is specifically prescribed, with a minimum of six miles.

The police claim to control cars exactly as in

Europe, and a driver is further legally bound to stop—

(a) When requested to do so by any police officer for the purpose of ascertaining his name and address or for any other reasonable purpose; or

(b) When approaching restive horses or animals, or when requested to do so by any person having charge of a restive horse or animal; or

(c) When an accident occurs to any person or to any animal or vehicle in charge of any person owing to the presence of the motor-vehicle on the road.

Horns and lamps (two front and one back) must be employed as in Europe.

Careful and cautious driving is, however, vital in India. The traffic in certain streets in the cities almost rivals that in London, while the universal use of the ox-cart produces much activity even on the country roads. The native is a poor driver, and easily loses his head. Save in the cities, all animals often shy badly at motor-cars. Draught oxen, only guided by the rope through the nose, which seldom serves to hold them in, will often plunge wildly and swing a cart before a car in the twinkling of an eye. It is common for such carts to plunge off the road into an adjacent field as the car approaches, and no motorist need be perturbed at this. Usually a prudent native stops, dismounts, and draws well to the side as a car goes by. Everything gives way to the motor-car in India, particularly if driven by a white

sahib, but this universal acquiescence in its supremacy should not be abused. It is always needful to sound the horn frequently and well at long distances if the car wishes a clear passage. Ordinary pedestrians often show an astonishing disregard of the presence of the car, and will not move till the very last moment. Two general rules of driving in India are :

*Recollect that no native whatever is capable of judging distances or speeds. He will always wrongly estimate how far a car is from him, or where he can cross the road in front of it.*

*Never assume a native, or a cart, or an animal will do on the approach of the car exactly what one would anticipate that he or it would do in Western countries. There is almost a positive certainty that exactly the opposite will be done. A man stepping aside "to safety" will often step right back under the very wheels of the car.*

It is a serious thing to touch a native or anyone belonging to him. He is quite capable of enforcing his rights, and will not hesitate to carry a grievance or injury before the law courts, particularly if he has the interested backing of a native vakil, or lawyer. It is better, should one have the misfortune to damage his property, to pay compensation at once and generously—in that case he will probably be satisfied.

There is, generally speaking, heavy animal traffic on the roads in India, but mostly of the larger kind. The dogs are chiefly pariah and ownerless.

"Keep to the left" is the rule of the road, but



it is entirely disregarded in practice if found worth while to do so by the native drivers. In the cities police patrols and police notifications insure some measure of observance, but in the country most people are a law unto themselves. The only advantage is they know the white man will keep to the left, and they will—perhaps “may”—order their own progress accordingly.

Night driving is exceptionally pleasant, but exceptionally risky, as many heavy carts do not carry lights, and unevennesses of road surface may not be observed till too late. On some roads it is officially prohibited. Motorists should remember there is practically no twilight, and that dawn comes very suddenly. It is even in summer not light much before 5.30 a.m., and it is almost quite dark by 7 to 7.30 in the evening. Lamps must be lighted between half an hour after sunset and half an hour before sunrise.

The attitude of most of the natives will greatly depend on the individual motorist. In India some drivers are overbearing and studiously offensive to the native. Doubtless the latter is obtuse and unintelligent, often indifferent, and sometimes hostile, but domineering methods are not likely to improve him. Probably the native would be more friendly if more consideration were shown him.

It may be added that, though the India Motor Act does not specify any poles or signs for the regulation of motor traffic, these will undoubtedly come in time, since their advantages are obvious. Attempts are already being made to introduce a solid red disc, indicating prohibited roads: a hollow red triangle, urging caution in view of

•

dangerous corners and cross-roads; and a white ring, prescribing a limited speed of ten miles or less. These signs are already to be met with in Southern India.

### **Dāk Bungalows\***

THERE are dāk (pronounced "dork") bungalows, or rest-houses, every few miles throughout India—on some roads every eight or ten miles, on others about every fifteen. Some of them are excellent, with a khansama, or butler, who cooks well, either your own food or some he procures himself, and a khidmatgár, or table servant. Many bungalows, especially in the South, are, however, wretched, with only a villager to keep the key, and no food is procurable. In these there are often only two or three charpoys (beds made of rope or webbing stretched on a four-legged wooden frame), and very few conveniences of any sort. In the North and Centre they are often excellent—as good as anyone need want; but it is advisable never to assume they are free from insects. In many of the bungalows there is some cheap furniture, plate, glass, crockery, and table linen; but in none of them is there any mattress or bedding, and either blankets or fur rugs must be taken, as the nights are cold in the winter months. Mosquito curtains should be taken in summer, and they do not occupy much room. The charge is one rupee per night for each

\* Denoted by the letters "D B." in all Indian records. In Southern India "T.B" denotes Traveller's Dungalow, and the butler in charge is designated "matey"

room occupied, with payment for articles ordered or consumed, and "presents" for the attendants. Before occupying rooms in a dâk bungalow they should be thoroughly aired by keeping doors and windows opened. It is also advisable to put the beds and chairs in the sun before they are used. Appended are the rules for dâk bungalows in the Punjab; they are quite typical of the others in India, and can be accepted as such :

1. All travellers, European or native, can claim shelter for twenty-four hours in a staging bungalow, for which they should pay a fee of one rupee each. Two rupees become due for twenty-five hours; three rupees for forty-nine hours' occupancy, and so on. There are, however, special rates and rules applicable to the bungalows in the Simla district.

2. If a traveller remains not more than three hours, a fee of eight annas only should be charged.

3. No charge should be made for children under fourteen years of age.

4. European servants travelling with ladies should be charged at half-rates. Native servants should not be charged for, unless they occupy a separate room.

5. European or native servants travelling with children without their master or mistress should be charged at full rates.

6. Should it be necessary, from want of accommodation, for two or more persons, whether a married couple or not, to occupy the same room, half-rates only should be charged for each person.

7. Priority of arrival gives no exclusive right of occupancy to any traveller or party of travellers.

When necessary, on account of the number of travellers, half the accommodation of the bungalow should be allotted to ladies.

8. No person can claim shelter in a staging bungalow for more than twenty-four hours. After the expiration of that time he must leave if required to do so by other travellers.

9. Travellers should on arrival at a staging bungalow enter their name and hour of arrival in the book which will be brought to them for the purpose.

10. Travellers should on their departure enter in the travellers' book the amount of the stated fees paid by them in accordance with these rules, noting the time of their departure.

11. Travellers pitching tents in the enclosure of a staging bungalow, and not using the bungalow, should pay eight annas a day for each tent. Travellers using the bungalow and paying the regular fees should not be charged for tents.

12. A fee of eight annas a day should be paid for every wheeled vehicle, palanquin, horse, mule, or other animal used for riding or driving, and for every tent, box, or other property which is left in the compound of a staging bungalow after the departure of the owner.

13. Every person who obtains accommodation at a staging bungalow should pay the prescribed fees, whether travelling on duty or not.

14. The khidmatgār of the bungalow will, if required, cook provisions furnished by travellers. Those who employ him to supply food must, unless terms have been specially agreed upon, pay according to the tariff hung up in the rooms.

15. Whoever loses, breaks, or injures any furniture or other property belonging to the bungalow should pay at the rate specified in a list kept by the servants in charge of the bungalow.

16. Punkahs and tattís\* are provided for each, staging bungalow in the hot season. Men employed on them should be paid by the travellers for whom they are required.

17. All accounts should be settled daily.

Below is given a list of the chief dāk bungalows. There are many other smaller ones, and inquiries along the route will soon indicate their existence and their locality:

Abbotabad.	Baheri.	Bhandara Road.	Burgedhar.
Adampur.	Bahram Ghat.	Bharakao.	Burjee.
Adwani.	Bajoura.	Bharwani.	Burodia.
Agra Fort.	Balaghat.	Bhera.	Bustee.
Ajmere.	Balasore.	Bheraghat.	Buxar.
Aligarh.	Bali.	Bhum Tal.	
Almorah.	Banda.	Bhopal.	Camool.
Amarwara.	Bandhi.	Bhavnagar.	Caragolah.
Ambala.	Banga.	Bhukkur.	Casse.
Amethi.	Bankipore.	Bhurtpore.	Chakradharpur.
Amraoti.	Bans.	Bijnath.	Chakarkand.
Amraoti Camp.	Bara Banki.	Bijnor.	Chakoti.
Anri.	Barakur.	Bikaner.	Chakrata.
Arrah.	Baramala.	Bilaspur.	Chaman
Arunwala.	Baraset.	Birhman.	Chandbali.
Attock.	Bareilly.	Boghesur.	Changla Gali.
Azimghar.	Barh.	Bogodhur.	Chap Bareree.
	Barisal.	Bongong.	Chapra.
Babina.	Baroda.	Bordohi.	Chariol Jhang.
Badnur.	Barripur.	Borlad.	Cherat.
Badri.	Batala.	Borogaon.	Chhab-Chhabra.
Badwana.	Behar.	Budaon.	Chhindwara.
Bagi.	Benares Cant.	Buggoola.	Chichawatni.
Baghalli.	Berhampur.	Bukhtiarpur.	Chicholj.
Bagru.	Beshit.	Bulandshahr.	Chipalghat.
Bahadur Gurh.	Bettiah.	Bundelkhand.	Chira.
Bahadur Khan.	Betul.	Bundo.	Chirirdongri.
Bahal.	Bhagalpur.	Burbrooj.	Chittagong.
Baha-ud-din.	Bhakkur.	Burdwan.	Chittoor.

\* Fibre blinds with water running through them.

Chok Ram Dass.  
Choonbatty.  
Chopda.  
Chul.  
Chanderi.  
Chapra.  
Chutturpore.  
Cuttack.

Dabha.  
Dabwali.  
Dacca.  
Dadamandi.  
Dadri.  
Dahanu.  
Dalmau.  
Damoh.  
Dankhor.  
Dard.  
Darobal.  
Daryabad.  
Datia.  
Debiabura.  
Dehri.  
Dehri-on-Sone.  
Deoband.  
Deolapur.  
Deori.  
Dera Din Panah.  
Dera Ghazi Khan.  
Derol.  
Dewal.  
Dhamkeri.  
Dhamtari.  
Dhanwai.  
Dhar.  
Dharmpur.  
Dharmasala.  
Dheloo.  
Dhobir.  
Dhoda.  
Dholpur.  
Dhuma.  
Dhuri.  
Dimal.  
Dmanagar.  
Dinapore.  
Dinga.  
Domar.  
Dongagully.  
Dood Kandyd.  
Doomka.  
Dorka.  
Doulatnuggur.  
Dowlutpur.  
Drug.  
Dunnsara.  
Dwali.

Dwara.  
Dwarahat.

Ellichpur.  
Etah.  
Etawah.

Faridnagar.  
Farruckabad.  
Fatehgarh.  
Fatehpur.  
Fatahjang.  
Fazilka.  
Ferozepore Cant.  
Fort Sandeman.  
Frasergunge.  
Fyzabad.

Gadarwara.  
Gangajalghati.  
Ganjam.  
Ganjo.  
Ganora.  
Garhi.  
Garhi Ikhtiar.  
Khan.  
Garwa.  
Ghaziabad.  
Ghaziपुर.  
Ghotki.  
Gidhaur.  
Giridih.  
Giawan.  
Godagari.  
Gomda.  
Gondal.  
Gondia.  
Goomsur.  
Goona.  
Gooty.  
Gorakhpur.  
Gohalpur.  
Gubta.  
Gujranwala.  
Gujrat.  
Guna.  
Gunesghanj.  
Gurdaspur.  
Gurgaon.  
Gyapopal.  
Hadgaon.  
Hafizabad.  
Hajipur.  
Hamirpur.  
Hangu.  
Harda.

Hardoi.  
Hardwar.  
Haripur.  
Harnai.  
Hassan Abdal.  
Hata.  
Haveli.  
Havara.  
Hinganghat.  
Hissai.  
Hoshiarpur.  
Hoshungabad.  
Hunsur.  
Hutti.  
Hyderabad (Sind).

Indore.  
Isakhel.  
Itarsi.

Jabalpur.  
Jacobabad.  
Jafarabad.  
Jainapuram.  
Jais.  
Jalaun.  
Jamnagar.  
Jamnori.  
Jandiala.  
Jatingri.  
Jaunpur.  
Jehanabad.  
Jellalore.  
Jessore.  
Jhalida.  
Jhang.  
Jhansi.  
Jhelum.  
Jhingergacha.  
Jhumia.  
Jigni.  
Jullowala.  
Jullundur Cant.  
Jummoo (Tawi).  
Jumrood.  
Junagarh.

Kach.  
Kahan.  
Kaimar.  
Kalabagh.  
Kalahasti.  
Kalapani.  
Kalka.  
Kalpi.  
Kalukhira.  
Kamahati.

Kamptee.  
Kancra.  
Kapilmuni.  
Karachi.  
Karauli.  
Karnal.  
Karnul.  
Kanor.  
Kathor.  
Katni.  
Kawa.  
Khagaul.  
Khandia.  
Khandwa.  
Khanpur.  
Kharari.  
Khatauli.  
Khetri.  
Khehra.  
Khizabad.  
Khulna.  
Khurian.  
Khowai.  
Kushalgarh West.  
Khushab.  
Khyrim.  
Kishangarh.  
Kohat.  
Kokai Mahal.  
Kolkai.  
Kollegal.  
Kotah.  
Kotdwara.  
Kotgarh.  
Kothi.  
Kotri.  
Kuda.  
Kulachi.  
Kunjah.  
Kural.  
Kurandvad.  
Kuresche.  
Kurignam.  
Kurseong.  
Kasauli.  
Kuthar.  
Kutiyana.

Labpur.  
Lachman Tal.  
Lahore Cant., East.  
" " West  
Laharpur.  
Lakhi.  
Lalitpur.  
Lalamusa.  
Lalsot.  
Lambagaon.

# *DĀK BUNGALOWS.*

21

Landi-Khana.  
Langla.  
Lansdowne.  
Lar.  
Larkana.  
Leich.  
Likhi.  
Limbdii.  
Lingavapet.  
Loharu.  
Loralai.  
Lucknow Cant.  
Lucknow.  
Ludhiana.  
Lunavada.  
Lyallpur.

Madhupur.  
Madhabani.  
Maharajpur.  
Mahespur.  
Mahoba.  
Mainpuri.  
Majhauili.  
Malot.  
Manglod.  
Mangoli.  
Mankera.  
Mansehra.  
Marble Rocks.  
Matia.  
Meeran Meer.  
Meerut Cant.  
Mehmadabad.  
Mehri.  
Mercara.  
Mhow.  
Miani.  
Midnapore.  
Miranpur Katra.  
Mirjan.  
Mirzapur.  
Mithankot.  
Modhera.  
Moga.  
Moghalsarai.  
Mohan.  
Mohanpur.  
Mohgaon.  
Mohpani.  
Mokameh.  
Modasa.  
Monghyr.  
Montgomery.  
Mooltan.  
Moradabad.  
Morar.  
Morvi.

Moth.  
Motihari.  
Muddapur.  
Multai.  
Multan Cant.  
Multhan.  
Mungeli.  
Munikera.  
Munsur.  
Mussourie.  
Muttra.  
Muzaffarnagar.  
Muzaffargarh.  
Muzaffarpur.

Nagina.  
Nagpur.  
Nahan.  
Naini Tal.  
Najibabad.  
Nakodar.  
Nandgaon.  
Narainganj.  
Naregal.  
Narkua.  
Narsingpur.  
Navsari.  
Nawabganj.  
Nawadah.  
Nimbahna.  
Nipani.  
Nizampatam.  
Nowgong.  
Nowshera.  
Nui mahal.  
Nurpur.  
Nuseerabad.

Ojein.  
Okamandel.  
Ongole.  
Orissa.

Pachmarhi.  
Padhani.  
Palampur.  
Palwal.  
Panali.  
Paniput.  
Parasnath.  
Partabgarh.  
Pathankot.  
Pathri.  
Patiala.  
Peeplee.  
Pehapur.

Pendur.  
Peshawar Cant.  
Petlad.  
Phagwarah.  
Phillaur.  
Pind-Dadan-  
Khan.  
Pipar.  
Piplia.  
Pelibhist.  
Pooree.  
Porbandar.  
Puntamba.  
Purnea.  
Purulia.

Quetta.

Rae-Bareli.  
Rahatgarh.  
Rahon.  
Raipur.  
Rajanpur.  
Rajbari.  
Rajgarh.  
Rajkot.  
Rajmahal.  
Ray-Nandgaon.  
Rajpur.  
Ramagiri.  
Ramallakota.  
Ramgarh.  
Rampur.  
Ramtek.  
Ramibagh.  
Ranikhet.  
Ratanpur.  
Rawal Pindi.  
Raya.  
Rehli.  
Rewari.  
Rohtak.  
Roorkee.  
Rupal.  
Rangpur.  
Ratlam.

Saharanpur.  
Sahibgunge.  
Sailana.  
Sambalpur.  
Sankala.  
Saugor.  
Saoner.  
Saranghar.  
Sargodha.

Sardhana.  
Sasaram.  
Satghara.  
Saurath.  
Sehore.  
Sekerse.  
Sagauli.  
Sirajganj.  
Seohara.  
Shahganj.  
Shahdara.  
Shahjahanpur.  
Shahdheri.  
Shahpur.  
Shahpura.  
Shahrig.  
Shamli.  
Sheikhpura.  
Sheopur.  
Sherkot.  
Sherpur.  
Shikarpur (Sind).  
Shikohabad.  
Shirol.  
Sholapur.  
Sialkot.  
Sibi.  
Sihora Road.  
Siliguri.  
Singhana.  
Singhia.  
Sirsa.  
Sitapur.  
Sirohi.  
Sohna.  
Solon.  
Sone East Bank.  
Sukkur.  
Sultanpur.  
Sumarghar.  
Sunel.  
Suri.  
Surma.  
Suragarh.  
Sutna.

Taki.  
Talbahat.  
Tando Adam.  
Tando Alahyar.  
Tanjore.  
Tatitangalam.  
Tehri.  
Terai.  
Thal.  
Thanesar.  
Theog.  
Thar.

Tilhar.	Torkhan.	Unao.	Wardha.
Titaliya.	Tret.	Uri.	Wazirabad.
Titterwanee.	Tumkur.	Vehowah.	Varick
Toba Tek.	Ulwar.	Wadhwan Camp.	Ziarat.
Togh.	Umranaiah.	Waltur.	Zira.
Tongsa.	Umreth.	Wandiwash.	
Tonk.			

This list does not include most of the travellers' bungalows in the Bombay Presidency and South India, which are indicated in the route maps.

It should be added that the Public Works Department of each Presidency and Province will on application supply a complete list of all the dāk bungalows within its boundaries.

### Hotels

THE hotels throughout India are generally poor, according to European ideals. A new and better, but much more expensive, type is, however, springing into existence in localities frequented by Europeans. At the same time, the existing ones are by no means so bad as they are painted. The inadequacy of the bathing arrangements—the portable metal tub is ubiquitous—is generally much felt by tourists. Beds are, however, quite clean, and the food is often more than passable, provided the traveller can reconcile himself to Indian diet. Mosquito curtains are provided in the bedrooms, and also punkahs. In great heat at night fix a bath-towel on to the punkah so that it just passes over the nose, and promise a few annas to the punkah wallah as a reward for special energy—four annas will suffice.

The inclusive charge varies from five to fifteen rupees a day—at the former low charge one can



often be comfortably entertained. Prices are much higher in winter than in summer. In many cases the smaller hotels are under native control, which is quite passable, but the woman owner or manager is rapidly coming to the front with altogether good effects. The moral for all tourists is, Do not expect the European standard of hotels, and there will be no disappointment. Appended is a list of the chief hotels, some of which, however, close during the summer months:

AGRA—	Florence Hotel (Kandy).
Laurie's Great Northern Hotel.	Grand Oriental Hotel (Colombo)
Hotel Metropole.	Grand Central Hotel (Nuwara Eliya)
Rustom Family Hotel.	
AI LAHABAD—	DALHOUSIE—
Laurie's Great Northern Hotel.	Strawberry Bank Hotel.
BANGALORE —	Springfield Hotel.
Bronson's "West-End Hotel"	Bull's Head Hotel.
The Cubbon Hotel	Balun Hotel
BEILARY—	DARJEELING—
The Royal Hotel.	Woodland's Hotel
BLNARES—	Drum Druid Hotel.
Hotel de Paris	Grand Hotel, "Rockville" (Mrs. Monk's).
BOMBA Y—	Jones's Hotel and Restaurant.
Taj Mahal Palace Hotel	DEHI—
Watson's Esplanade Hotel.	Maiden's Metropolitan Hotel.
Esplanade Hotel, Anneve.	Hotel Cecil
Great Western Hotel.	Laurie's Great Northern Hotel.
Pyke's Apollo Hotel.	
CALCUTTA—	FRASERGUNGE—
Great Eastern Hotel.	Dāk Bungalow
Grand Hotel (Mrs. Monk's).	FYZAFAD—
Grand Indian Lodge.	Graham's Hotel.
Spence's Hotel	HYDRABAD (DECCAN)—
Continental Hotel.	The Duke of Connaught Hotel
Hotel de Paris.	(Secunderabad).
Wallace's Hotel.	JAIPUR—
Adelphi Hotel	Kaiser-i-Hind Hotel.
CAICUT—	Jaipur Hotel.
Canaren's Hotel.	JUBBULPORE—
CAWNPORE—	Jackson's Family Hotel.
Civil and Military Hotel.	KALKA—
Empress Hotel.	Lawrie's Dāk Bungalow
Victoria Hotel.	KARACHI—
United Service Hotel.	Victoria Hotel (late Paul's).
CEYLON—	North-Western Hotel.
New Keena Hotel (Nuwara Eliya)	Royal Crown Hotel.
Bristol Hotel (Colombo).	KURSEONG—
Galle Face Hotel (Colombo).	Grand Hotel (Mrs. Monk's), late Clarendon.
Queen's Hotel (Kandy).	

- LAHORE—**  
 Charing Cross Hotel.  
 Nedon and Son's Hotel  
**LUCKNOW—**  
 Wutzler's Royal Hotel.  
 Civil and Military Hotel  
 Imperial Hotel.  
 Prince of Wales Hotel.  
**MADRAS—**  
 Connemara Hotel.  
 Prince of Wales Hotel.  
 The Castle Hotel.  
 G. D. Angelis and Son's Hotel  
 and Restaurant.  
 Victoria Family Hotel.  
 Elphinstone Hotel.  
**MAHAPLESHWAR—**  
 Fountain Hotel.  
 Ripon Hotel.  
**MANDALAY (BURMA)—**  
 Gale's Hotel.  
**MATHERAN—**  
 Granville Hotel.  
 Rugby Hotel.  
**MEERUT CANTONMENTS—**  
 Empress Hotel.  
 Meerut Hotel.  
**MOUNT ABU—**  
 Rajputana Hotel.  
**MURREE—**  
 Chambers' Hotel.  
 Lockwood Hotel.  
 Rowbury's Hotel.  
 Viewforth Hotel.  
**MUSSOORIE—**  
 Charleville Hotel.  
 Savoy Hotel.  
**MYSORE—**  
 The Gordon Hotel.  
**NAGPUR—**  
 Hotel close to station.  
**NAINI TAL—**  
 Grand Hotel.  
 Metropole Hotel.  
 Rohilla Lodge.  
 Waverley Hotel.  
**OOTACAMUND—**  
 Syk's Hotel.  
 Alta Chamber Hotel  
 Blue Mountain Hotel.  
 Bishopdown Hotel.  
 Excelsior Hotel.  
 Grace Cottage Hotel.  
 Longwood Hotel.  
 Rose Mount Hotel.  
 Shoreham Hotel.  
**PESHAWAR—**  
 The Alexandria Hotel.  
**POONA —**  
 Collets' Hotel.  
 Napier Hotel.  
 Royal Family Hotel  
 The Connaught Hotel  
**PUR —**  
 The Sanatorium (Miss Forbes)  
 The Seaside Hotel.  
**RAJPORE—**  
 Prince of Wales Hotel  
**RANGOON—**  
 Strand Hotel.  
 Royal Hotel.  
**RAWALPINDI—**  
 The Imperial Hotel.,  
 Flashman's Hotel.  
 Civil and Military Hotel.  
**SAHARANPORE—**  
 New Hotel.  
**SECUNDERABAD—**  
 The Duke of Connaught Hotel.  
**SH'ILONG—**  
 Grand Hotel de l'Europe  
**SIMLA—**  
 Hotel Cecil.  
 Lowrie's Hotel.  
 Longwood Hotel,  
 Grand Hotel  
 Elysium Hotel.  
 Metropole Hotel.  
 Corstorphan's Hotel  
 Central Hotel.  
**SRINAGAR—**  
 Nedou's Hotel.  
**TUTICORIN—**  
 The Royal Hotel.  
**UMBALLA—**  
 King Hotel.  
 Lawrence Hotel.  
 Robson's Victoria Hotel.

It should be added that there are scattered nearly all over India a very large number of railway-stations where ample sleeping accommodation exists. In some cases it is excellent, and in many quite good. Such accommodation can always be

expected at important junctions or where first-class refreshment rooms exist; in these cases all sorts of food are, of course, provided. At other stations "light refreshments" only are obtainable. Such refreshments, at the lowest expectation, consist of tea, coffee, biscuits, aerated waters, and a variety of English tinned provisions. Here is a typical list of provisions at a better-class station :

- Hazree,\* breakfast, tiffin.
- Dinner or supper.
- Sandwiches, soup or plate of meat, or curry and rice.
- Bread, butter, cheese, biscuits, cakes.
- Tea, coffee, milk (cup).
- Beer or porter (quarts, pints).
- Soda, Lemo-ginger-tonic with ice.
- Claret, hock, champagne, wine.
- Peg of whisky, brandy, wine, gin-liquor, etc.
- Ice (per glass, per seer).
- Cigars or cigarettes.

The motorist can often telegraph to a railway-station ahead to prepare food for him, and he can always be sure of finding it ready to time, as a rule quite palatable, and for the most part very reasonably priced.

At present prices are not raised anywhere to the motorist in India *because* he is a motorist. The white sahib doubtless owes this to his prestige as regards the natives, while dāk bungalows are, as stated, under an official scale of prices, and hotel proprietors are wise enough not to kill any bird which lays golden eggs (Appendix C).

\* *Chota hazree*, the early morning cup of tea and toast—"small breakfast."

### Railway Transport of Cars

THE motorist will undoubtedly make use of the railways in India. This does not mean that he will necessarily experience breakdowns, but there are parts of India which, owing to their backward road development, or to their less interesting nature, he may wish to avoid, and so pass on to other districts which, from one cause or another, he may find more attractive. The following are the universal charges common to all the lines in British administered territory, and under the same State control as to general policy.

Motor-cars, whether packed or unpacked and with empty tanks, are carried by passenger train in separate vehicles at three annas per truck per mile at owner's risk, and at six annas per truck per mile at railway risk, securely packed. There is no railway risk rate for unpacked motor-cars. On the Great Indian Peninsula Railway, the South Indian Railway, the Nizam's Guaranteed State Railway, and the Madras Railway, the loading and unloading of motor-cars must be done by owners whether booked at owner's risk or railway risk.

The chief Indian railway-lines to which these charges apply are the following:

Great Indian Peninsula*	...	...	...	5 feet 6 inch gauge.
East Indian*	...	...	...	} Standard gauge.
Bengal-Nagpur*	...	...	...	
Madras*	...	...	...	
Bombay, Baroda, and Central India*	...	...	...	
North-Western*	...	...	...	
Oudh and Rohilkhand	...	...	...	}
Eastern Bengal*	...	...	...	

## RAILWAY TRANSPORT OF CARS 27

South Indian*	...	...	...	...	{ Standard gauge and metre gauge.
Jodhpur-Bikaner*	...	...	...	...	
Bhavnagar-Gondal-Junagad Porbandar	...	...	...	...	{ Metre gauge.
Southern Mahratta*	...	...	...	...	
Lucknow-Bareilly section* of the Rohil-	...	...	...	...	
khand and Kumaon	...	...	...	...	
Nizam's Guaranteed State*	...	...	...	...	{ 2 feet 6 inch gauge.
Bengal and North-Western*	...	...	...	...	
Assam Bengal*	...	...	...	...	
Barsi Light	...	...	...	...	

The asterisk indicates that, on the specific lines, if two motor-cars belonging to the same owner are loaded and sent in one truck to the same owner, they will be charged at four and a half annas per truck per mile at owner's risk, and nine annas per truck per mile at railway risk, Risk Note Form B, which relieves the company of all responsibility, being obtained when booked at owner's risk.

As regards the Madras railways, however, the privilege is not general. It only exists on the North-East line, the southern section of the East Coast (State) and the old Madras Railway.

On the Great Indian Peninsula, return tickets for motor-cars are issued at a fare and a half for the double journey, and are available for return within six months. Some other lines copy this example.

The South Indian Railway further specifies that motor-cars will not be accepted in through booking over this railway by goods or passenger train except under special arrangement, and, further, that it will accept no responsibility for fittings which are easily detachable, such as lamps, inflators, tools, bells, etc., and rubber mats, spare tyres, etc.,

unless securely packed in box or case and a receipt specifically obtained for same.

As a matter of fact, other lines imitate this policy of disclaimer.

It is hardly necessary to quote the rates for transport of cars by luggage train, though they are exceptionally low—about one pie, or one-twelfth of a penny per maund per mile—since a motorist is most strongly advised never, under any circumstances, to use them, as delivery is always very slow. Still, for information, the following details are given as supplied by the Great Indian Peninsula—they are typical of the rest.

“Motor-cars tendered for despatch for carriage by railway should have their tanks empty and thoroughly clean and free from vapour before they can be accepted, when they will be charged at the third-class rate (which is based at two-thirds pie per maund per mile) at owner's risk, subject to a minimum charge of twenty-seven maunds per each car, provided other goods can be loaded in the same truck. If securely packed the charges will be at the fifth-class rate, subject to the same minimum, which is based at one pie per maund per mile at railway risk. A terminal charge of eight pies per maund in local booking and six pies per maund in through booking will be made, and when the distance is below seventy-five miles a short-distance terminal charge of three pies per maund will be made in addition. In booking, from or to Bombay or Dadar in local booking, a terminal charge of six pies per maund in Bombay or Dadar and four pies per maund at the other end will be made.

"A maund is equivalent to 82.29 pounds, and a pie is one-twelfth of an anna, which in English money represents one penny.

"If a motor-car carried by goods train fully occupies a waggon, the charges will be at two annas six pies per truck per mile at owner's risk, and owner to do loading and unloading."

Cheaper terms are usually offered for the conveyance of component parts of a motor-car in small lots not requiring a separate vehicle.

It should be mentioned that railway time throughout India is standard time,  $5\frac{1}{2}$  hours in advance of Greenwich, and that all the chief towns have their own local times. Thus:

Bombay	time	is	39	minutes	behind	railway	time.
Lahore	"	32	"	"	"	"	"
Calcutta	"	24	"	"	before	"	"
Allahabad	"	2	"	"	behind	"	"
Delhi	"	22	"	"	"	"	"
Agra	"	19	"	"	"	"	"
Madras	"	9	"	"	"	"	"

The hours, too, on the railway are counted from one to twenty-four, beginning at midnight. It is necessary to recollect this difference in time if one has connections to catch.

### The Carriage of Petrol

THIS question must be carefully considered by the motorist. Petrol is only obtainable in the larger cities, and the tourist must therefore arrange with one of the chief motor companies to have supplies sent ahead of him by train along his contemplated line of route.

At present, however, the railway companies are

only allowed to carry twelve gallons on each passenger train in drums of four gallons each. Thus, if there are several persons motoring in one district, there may be serious delay in reprovisioning a car with petrol unless very ample notice is given in advance. Trains are naturally not very frequent over some stretches of line. Petrol is dear at any time, the price varying from R. 1.2 to R. 1.10 per gallon in Bombay, Madras, and Calcutta, R. 1.7 or R. 1.8 in Nagpur, Rs. 2 in Lahore, and from Rs. 2 to Rs. 4 a gallon in remote places. To these prices must be added the cost of carriage when the petrol is forwarded to intermediate stations.

The railway charges are:

*By Goods Train.*—Petrol or motor-spirit, carefully packed, is charged at owner's risk at the fourth-class rate, which is based at five-sixths pie per maund per mile, and at "X" class rate, which is based at one and a half pies per maund per mile at railway risk. If in consignments of eighty-one maunds and over, it is charged at owner's risk at the third-class rate, which is based at two-thirds pie per maund per mile. Prepayment of freight is compulsory.

Varying arrangements exist for its transport. For instance, from Madras by goods train any quantity can be booked, but only once a week, on Fridays, on which day special arrangements are made for the conveyance of dangerous goods of this description. Hence every motorist should make careful inquiries from the firm with which he is co-operating.

*By Passenger Train.*—Petrol is carried at full



parcels rate under the same rates as to packing as in the case of goods trains, but the maximum on one train is, as stated, 12 gallons. These are the rates on the Indian lines for parcels exceeding 5 seers or 1 cubic foot. Five seers, it may be added, is equivalent to one-eighth of a maund, and forty seers equals one maund. The rate, it will be seen, is thus about one pie per maund (or one-twelfth of a penny for 82 pounds) per mile.

DISTANCE IN MILES.		WEIGHT.			
Exceeding.	Not exceeding.	Not exceeding 10 Seers.	Not exceeding 20 Seers.	Not exceeding 30 Seers.	Not exceeding 40 Seers.
		Rs. A.	Rs. A.	Rs. A.	Rs. A.
	25	0 4	0 4	0 4	0 4
25	50	0 4	0 4	0 8	0 8
50	75	0 4	0 8	0 12	0 12
75	100	0 4	0 8	0 12	1 0
100	125	0 8	0 12	1 0	1 4
125	150	0 8	0 12	1 0	1 8
150	175	0 8	1 0	1 4	1 12
175	300	0 8	1 0	1 8	2 0
300	325	0 12	1 4	1 12	2 4
325	350	0 12	1 4	2 0	2 8
350	450	0 12	1 8	2 4	3 0
450	475	1 0	1 12	2 8	3 4
475	500	1 0	1 12	2 12	3 8
500	600	1 0	2 0	3 0	4 0
600	625	1 4	2 4	3 4	4 4
625	650	1 4	2 4	3 8	4 8
650	750	1 4	2 8	3 12	5 0
750	775	1 6	2 12	4 0	5 4
775	900	1 6	2 12	4 2	5 8
900	925	1 9	3 0	4 6	5 12
925	950	1 9	3 0	4 10	6 0
950	1,050	1 9	3 2	4 12	6 4
1,050	1,075	1 12	3 6	5 0	6 8

DISTANCE IN MILES.		WEIGHT.			
Exceeding	Not exceeding	Not exceeding 10 Seers	Not exceeding 20 Seers	Not exceeding 30 Seers	Not exceeding 40 Seers
		Rs A	Rs 1	Rs 1	Rs A.
1,075	1,100	1 12	3 6	5 4	6 12
1,100	1,200	1 12	3 8	5 6	7 2
1,200	1,225	2 0	3 12	5 10	7 6
1,225	1,250	2 0	3 12	5 14	7 10
1,250	1,333	2 0	4 0	6 0	8 0
1,333	1,358	2 4	4 4	6 4	8 4
1,358	1,383	2 4	4 4	6 8	8 8
1,383	1,500	2 4	4 8	6 12	9 0
1,500	1,525	2 8	4 12	7 0	9 4
1,525	1,550	2 8	4 12	7 4	9 8
1,550	1,666	2 8	5 0	7 8	10 0
1,666	1,691	2 12	5 4	7 12	10 4
1,691	1,716	2 12	5 4	8 0	10 8
1,716	1,833	2 12	5 8	8 4	11 0
1,833	1,858	3 0	5 12	8 8	11 4
1,858	1,883	3 0	5 12	8 12	11 8
1,883	2,000	3 0	6 0	9 0	12 0
2,000	2,025	3 4	6 4	9 4	12 4
2,025	2,050	3 4	6 4	9 8	12 8
2,050	2,166	3 4	6 8	9 12	13 0
2,166	2,191	3 8	6 12	10 0	13 4
2,191	2,216	3 8	6 12	10 4	13 8
2,216	2,333	3 8	7 0	10 8	14 0
2,333	2,358	3 12	7 4	10 12	14 4
2,358	2,383	3 12	7 4	11 0	14 8
2,383	2,500	3 12	7 8	11 4	15 0
2,500	2,525	4 0	7 12	11 8	15 4
2,525	2,550	4 0	7 12	11 12	15 8
2,550	2,666	4 0	8 0	12 0	16 0
2,666	2,691	4 4	8 4	12 4	16 4
2,691	2,716	4 4	8 4	12 8	16 8
2,716	2,833	4 4	8 8	12 12	17 0
2,833	2,858	4 8	8 12	13 0	17 4
2,858	2,883	4 8	8 12	13 4	17 8
2,883	3,000	4 8	9 0	13 8	18 0

As a purely typical instance, the mail-train rate of freight from Madras to Calcut on the west (414 miles) is R. 1.8 per drum of 4 gallons, and to Poona on the north (675 miles) Rs. 2.8 per similar quantity. A 4-gallon drum of petrol weighs approximately 40 pounds.

In view of the difference of arrangements, the Railway Board of India has proposed that at the next meeting of the India Railway Conference Association the question shall be considered of assimilating for all railways in India the rates and conditions under which motor-cars and petrol shall be carried. At the same time, each railway may, it is suggested, supply information as to places on the line where petrol can be purchased and cars repaired.

As matters stand now, all motorists should arrange with firms of standing in India to provision them along specific routes, and this can be done with great ease. The following firms can be recommended (Appendix B):

AGRA : H. Pestonjee.

BOMBAY : The Western India Motor Company,\*  
Rampart Road.

Bombay Motor-Car Company.

CALCUTTA : The Assam Oil Company, 2, Clive  
Ghat Street ; the Burma Oil Com-  
pany ; the Standard Oil Com-  
pany ; Messrs. Graham and Co. ;  
Messrs. Kilburn and Co., 4, Fair-  
lie Place.

These companies will deliver petrol all over India, and especially on the route to Peshawar.

\* All supplies as far as Gwalior, 685 miles

If any tourist wishes petrol so distributed, the Automobile Association of Bengal, of 57, Park Street, Calcutta, will gladly make arrangements with one of the above companies to carry out the work, or will put him in touch with the company to whom he wishes to give the order.

These companies have petrol depots everywhere—the Assam Oil Company having, for instance, agencies at, among other places, Fyzabad, Allahabad, Lucknow, Cawnpore, Agra, Delhi, Lahore, Meerut, Rawal Pindi, Aligarh, and Benares.

CAWNPORE: Messrs. Staines, The Mall.

Petrol and oil from Cawnpore to Calcutta, 624 miles, or via Gya, 664 miles. Also anywhere in the United Provinces.

COLOMBO: Messrs. Walker, Sons and Co., Ltd.

DELHI: Pearey Lal and Son.

DHULIA: Ardeshir Dalal.

INDORE: Central India Cycle Agency.

JULLUNDUR: Bombay Motor-Car Co.

LAHORE: Motor and Cycle Agency (Punjab),  
Charing Cross, Upper Mall.

Supply everything in motor goods—petrol, oil, engine oil, carbide, etc.—in the whole of the Punjab, from Delhi to the Khyber Pass, on the North-West Frontier Province, and to Srinagar, in Cashmere State. Petrol is about 2s. a gallon in Lahore, and a few pence per gallon more farther on, according to distance.

LUCKNOW: Oriental Motor Company.

MADRAS: Messrs. Oakes and Co., 200, Mount Road.

Supply petrol, and, indeed, all motoring requisites, in any part of India south of Bombay and Calcutta. Branch at Ootacamund.

BANGALORE: Indian Cycle and Engineering Co.,  
Stafford House.

POONA: Messrs. F. B. Stewart and Son.

RAWAL PINDI: Bombay Motor-Car Co.

As a rule, Shell, Burma, and Assam spirit can be obtained at most depots, but north of Delhi chiefly Assam and Burma. Shell is by many thought to be the best—and dearest—but the others are sufficiently good. Many motorists maintain that, all things considered, petrol gives better results in India than in England.

Through Gwalior's territory petrol is supposed to be obtainable at all of the numerous dāk bungalows, but the supply is doubtful.

Possibly petrol will soon be obtainable at Murree and Srinagar.

The Central Provinces are best covered by arrangements made with Bombay firms.

### **Motor Accessories and Repairs**

THE prices of motor accessories often vary materially from home quotations; but here is a typical list, which will give the motorist some idea of the Indian scale of charges:

				Rs.	A.
Accumulators, 15 amp. 4 volts	...	...	each	18	0
" 20 " "	...	...	"	20	0
" 25 " "	...	...	"	25	0
" 40 " "	...	...	"	40	0
" 60 " "	...	...	"	50	0
Batteries, Rotax dry	...	...	"	6	0
Burners, acetylene lamp	...	...	"	1	8
Chalk, French	...	...	per lb	0	8
Coils, B. and M. single cylinder	...	...	each	24	0
" double "	...	...	"	68	0
" Fuller's syntonic, single cylinder	...	...	"	32	8
" double "	...	...	"	70	0
Carbide of calcium	...	...	per lb.	0	12
Grease, motor	...	...	"	0	15
Oil, Speedoline "A" for air-cooled engines	...	...	per gal.	5	0
" " " " "	...	...	per quart tin	1	12
" " "B" for water	...	...	per gal.	5	0
" " " " "	...	...	per 1/2 gal. tin	3	0
" " "C" for gears	...	...	"	3	0

*Vacuum Oil Company's oils supplied at their own prices net*

				Rs.	A.
Oil, Collan, for leather clutches and belts	...	...	per tin	2	8
Outfits, repair tyre car	...	...	each	10	0
Plugs, sparking Pognon, genuine	...	...	"	6	0
" " hydra	...	...	"	5	9
" " E. I. C.	...	...	"	5	0
" " De Dion	...	...	"	3	8
" " oleo	...	...	"	3	8
" " oleo-magneto	...	...	"	5	9
Petrol, in customers' own vessels	...	...	per gal.	1	12

Although the car will be somewhat crowded, the motorist should make a point of taking with him much reserve petrol, and as many spare parts (from England) as possible. Thus he will have provided against minor mishaps. If anything more serious happens beyond his immediate personal ability to make good, he should instruct his servant to despatch a coolie to the most adjacent telegraph-office with a message directed to the

nearest motor firm, of which, however, there are relatively few in India. If it is a question of a replacement, the firm will promptly, if able, forward the desired part by mail-train; but if the car cannot be made to use it, there is nothing left but to wire for an expert mechanic to be sent out. Firms in India are quite accustomed to demands of this nature. If the breakdown is near the town—say twenty-five to fifty miles out—they will send a car with the mechanic; if not, he will go by train. Meantime the belated motorist must either encamp by the roadside, or put up in the nearest dāk bungalow—often not an unpleasant experience. Sometimes, if the breakdown is on the main road, another motor-car will come along and lend assistance, or, at any rate, carry a message or telegram—perhaps take on the passengers. Thus, if the motorists go to a rest-house lying back from the road, they must station a coolie by the wayside to stop and warn any passing car. Give him a written chit asking for assistance.

There are only some half-dozen firms in all India which can do big repairs—cast new cranks and cylinders, and so forth; and, of course, they keep much the largest stock of tyres and spare parts. Such firms which can be recommended as specially suitable for motorists are:

BOMBAY: The Western India Motor Company; Heylands, Gowalia Tank Road; the Bombay Motor-Car Company; the Bombay Cycle Agency.

Heylands is particularly well spoken of for general repair work.

CALCUTTA: The Russa Engineering Works,  
4, Fairlie Place.

COLOMBO: Messrs. Walker, Sons and Co., Ltd.

LAHORE: Motor and Cycle Agency (Punjab),  
Upper Mall.

MADRAS: Messrs. Oakes and Co., Mount Road.

NAGPUR: Government workshops may, if able,  
execute repairs.

BANGALORE: Indian Cycle and Engineering  
Co., Stafford House, and Motor  
House, South Parade.

These firms undertake repairs expeditiously, but they cannot, of course, pledge themselves to fulfilment of orders by any fixed day. Still, they can save several weeks as compared with an order placed in England.

As the car is often hundreds of miles from any sort of repair shop, it is essential that the chauffeur be a good mechanic, unless, of course, the owner has the necessary knowledge. In any case, Indian mechanics are practically useless, and their knowledge most elementary, though the higher-class firms have native employés, of whom they speak very highly.

There is much to be said in favour of carrying on the back of the car a folding bicycle, such as is used in the French army. In case of a breakdown, or for use along a road where it is inadvisable to take the car, but where foraging has to be done or information sought, it is quite invaluable. It takes up but little space.

Minor attendance to the car is not dear. This is a fair résumé of the current charges:



## MOTOR ACCESSORIES AND REPAIRS 39

Storage for cars of 14 h.p., including washing as often as is necessary, but not polishing:

			Rs. A.				Rs. A.
12 hours	...	...	0 12	Per week	...	...	5 12
24 "	...	...	1 2	Per month	...	...	20 0
Washing cars under 14 h.p.	...	...	...	...	...	...	1 2

Storage for cars over 14 h.p., including washing as often as is necessary, but not polishing:

			Rs. A.				Rs. A.
12 hours	...	...	1 2	Per week	...	...	7 12
24 "	...	...	1 8	Per month	...	...	25 0
Washing cars under 14 h.p.	...	...	...	...	...	...	1 2
Washing cars over 14 h.p.	...	...	...	...	...	...	1 8

Washing accommodation free, if car is washed by owner's chauffeur.

							Rs. A.
Polishing cars under 14 h.p.	...	..	...	...	...	...	1 8
Washing cars over 14 h.p.	...	...	...	...	...	...	1 8

Inclusive terms for garage, washing, and polishing:

							Rs. A.
For cars under 14 h.p.	..	..	...	per week	10	8	
" over 14 h.p.	...	...	...	" "	15	0	
" under 14 h.p.	...	..	...	per month	35	0	
" over 14 h.p.	...	..	...	" "	45	0	
Use of motor-pit	...	...	...	per day	2	0	
" motor-ramp	...	...	...	" "	2	0	
Services of drivers	..	...	...	per hour	0	12	
" "	...	...	...	per day	4	0	

As to tyres, it may be suggested that every motorist should carry a special gauge to enable him to test the air-pressure in his tyres from time to time. Driving on deflated tyres means spoiling them, as the canvas and rubber lining will separate, and so weaken the construction of the tyres. Most makers now stipulate the pressure to which the different sizes of tyres should be inflated, but the heat of the sun and heat caused through friction in tropical climates make it necessary to slightly alter these figures for India. Recently an able writer in the *Indian Motor News* stated that a

120-millimetre tyre inflated to 85 pounds when starting in the morning shows at mid-day a pressure of 115 pounds. Tyres should be inflated in India approximately as follows:

65-millimetre tyres, air-pressure				50 pounds	
80	"	"	"	55	"
85	"	"	"	60	"
90	"	"	"	70	"
100	}	"	"	75	"
105					
120	}	"	"	85	"
125					
135	"	"	"	90	"

Supplies of tyres are fairly easily obtainable in India (Appendix B), but, at the same time, it is best to motor with a recognized make and one of standard size. Ample reserves *must* be carried on the car. Prices are not relatively dear as compared with the home-bought article.

### Food and Outfit

EXCEPT in the towns and best bungalows, little food, save chickens and some fruit, can be obtained. Army rations—tea, bread, tinned meat, milk and butter, eggs, sardines, chocolate, cheese, jam, wine, or whisky, and soda-water—must be carried in the car, and can easily be bought in the towns, no large supplies being necessary. Water must not be touched for drinking purposes except when filtered through a Berkefeld filter, or, if clear running water, when well boiled. The Berkefeld patent travellers' filter can be obtained at the Army and Navy Stores, London, and generally in Bombay and Calcutta; the cost is 34s. and 41s. A "Thermos"

flask of relatively large size is used by some, since it will keep tea at boiling-point for many hours. It is equally useful for iced drinks.

A saucepan large enough to boil the tins of army rations, and a smaller one for fresh milk—which must also be very well boiled—with plates, knives, forks, and spoons, drinking glasses, kettle, and tea-cups, will be required. Enamelled iron plates, etc., are better than aluminium, which, though light and handy, do not improve the taste of the food, and are difficult to keep clean. Some, however, prefer aluminium cups for drinking purposes, as they are light and cheap, but these do affect the taste.

Ice and soda-water are generally obtainable even in small places, although the supply of the former may be limited, and some discrimination is necessary as to the origin of the latter, since natives are often wont to aerate impure water. Refreshments at railway-stations, being to a great extent under supervision, are usually quite good and not dear. It is advisable to carry a sparklet syphon with bulbs.

It is useless to take very thin clothes for a winter motor tour through India; they are only necessary when a stop is made in a large town, and north of Delhi they will not be wanted at all. For the south fairly thin tweeds, with a warmer coat for the evenings, will be required, and in the north, thick tweeds and warm clothes generally. It is of paramount necessity to avoid chills, which are very easily caught. Reserves of linen or extra garments can always be sent ahead, by *mail-train* if possible, and there is never any difficulty in arranging for the rapid washing of one's dirty

clothes; this is, however, while cheap, very destructively done.\* If light clothes are wanted, either for a lady or gentleman, they can best be ordered in India on arrival. Any native of standing and experience will give a good fit in twenty-four hours at a most reasonable price.

Blue or smoked motor-glasses are necessary, as the glare on the white roads is very trying to the eyes. Messrs. Laurence and Mayo, of 67-69, Chancery Lane, and most Indian cities, supply excellent glasses, both side-clip and hook. As there are practically no motors passing, there is no annoyance from dust, and as far as this is concerned glasses are not required.

The question of "bedding" often causes some difficulty to tourists. Usually in India this consists of a stuffed mattress, not too thick, a stuffed pillow, and a thin quilt (or *rezai*), the covering material being selected according to the wish and means of the purchaser, the prevalent choice being a cotton fabric of a quasi-Paisley pattern. It costs but a few shillings, and will compress into a very small space. As a rule, linen sheets are not taken, but that, after all, is a matter of choice. They require but little more space, and can be washed with ease during the day. A camp-cot—the "X" pattern for preference, as it is light and durable—fitted with rods and mosquito-net, is indispensable, as some dâk bungalow beds are not fit to be used. A folding rubber bath and a deck-chair, though not absolutely essential, will be frequently needed where furniture is scanty.

A small medicine-chest is advisable, containing

\* Appendix D.

antiseptic lint, zinc ointment, boric crystals, oil of lavender, oil of peppermint, oil of eucalyptus, 2-grain quinine pills, Burroughs, Wellcome and Co.'s tablets of aromatic chalk powder with opium (5 gr.), a box of liver pills, a bottle of chlorodyne, Dover powders, some bismuth, Kutnow's powder, and some brandy. As to mosquito cures, suggestions are legion. Many favour eucalyptus as the basis property of any mixture. Here is the recipe for one which can be strongly recommended, and is by no means unpleasant. A very few drops rubbed over the hands and face keep all mosquitoes away :

MOSQUITO MIXTURE.

50 per cent coconut-oil (for India) or olive-oil (for home).  
 25 per cent. kerosene.  
 25 per cent citronella oil  
 2 per cent carbolic acid crystals.

Benzine is recommended by some who have tried it for curing the intensely disagreeable bites of the sand-fly.

Two useful prescriptions are appended : No. 1 for checking a sharp attack of diarrhoea ; No. 2 for quietly regulating the action of the liver. Both have been used with much success in the Middle East :

No. 1.

R. Tinct. catechu	...	...	5i
Tinct. opii	...	...	℥x.
Bismuth. subnit.	..	...	grs. xv.
Pulv. cret. aromat.	...	...	grs. xx
Mucilago acaciæ	...	...	℥ii.
Aqua chloroformi	...	...	ad 5i.
Mitti 5viii.			

To be taken when there is diarrhoea. Half a wineglassful every three hours if necessary

## No. 2

R. Bismuth subnit.	.	grs. xv.
Mag. carb.	...	grs. xv
Tinct. rhei	...	ʒi
Tinct. zingiberis	.	ʒi
Tinct. cardamom co.	.	ʒi
Aqua chloroformi	...	ad ʒi.
Mitti ʒviii		

Half a wineglassful twice a day.

## Native Servants

IT is very necessary to take a good native servant, who can easily be obtained at Bombay or any port. He should be able to speak English—although, candidly, the non-English-speaking are usually better and more reliable—and several native dialects, if possible, although Hindustani will probably carry him all through the country. He should be able to cook, and to make himself generally useful. The wages for a travelling servant vary from fifteen to forty rupees per month, and he feeds himself and sleeps on the verandah. He will require a warm coat, thick shoes, and putties, as natives cannot stand any degree of cold. Unless a native is in European dress, he must not be allowed to enter the hotel or dāk bungalow with his shoes on, or with his turban off.

Much depends on the hiring of a servant. In examining chits or testimonials from previous employers, see if there is any gap in their times of issue. If there is, question him on it; he has possibly been in gaol. If he is trustworthy, he should be able to make all payments to coolies of

any sort or kind, and in doing so he will save his employer an anna or more for every one he expends. Give him a small sum of money, and tell him to account for it in detail when it is finished. Doubtless he will make small profits out of his employer, but it is necessary to wink at it. At the end of his term he expects a "present"—say, twenty-five to fifty rupees, or more for two or three months' service—and also his third-class fare back to the place of his original engagement should his term of employment end elsewhere. He will probably be able to pack and valet a lady as well as a gentleman. As to his English, be quite sure that not one native who claims to speak it understands one quarter of what one tells him even in the most elementary language. Never be afraid of constant repetition. In an emergency few natives are much good: they lose their heads, and they have little real power of organization. Treat the servant firmly, but fairly. Easy-going indifference is fatal to efficiency. A native servant will always be able to arrange for washing or needlework, or, indeed, for any minor requirement.

As any motorist will come more or less into contact with the various types of Indian servants, a list is appended:

Jamadar, head orderly.  
 Bearer, manservant—does lamps and drawing-room.  
 Mate, assistant to cook.  
 Butler, or khansama.  
 Khidmatgár, or table attendant.  
 Cook.  
 Masalchi, or bottle washer.  
 Dhobi, or washerman.  
 Chaprasi, or orderly.  
 Jhampane, or rickshaw-runner.  
 Ayah.  
 Sweeper.

Coachman.  
 Bhisti, or water-carrier.  
 Syce, or groom.  
 Grass-cutter.  
 Daftarie, or clerk.  
 Farash, or bookbinder.  
 Khalasi, or tent-pitcher.  
 Tindal, or head man of a coolie gang.  
 Coolie.  
 Chowkidar, or watchman.  
 Mali, or gardener.  
 Gwala, or milkman.

Wages in India are astonishingly small. A coolie is well paid with four to six annas a day; a casual job is worth only one or two annas; two annas are a good tip. A punka-wallah will labour all night for four to six annas. Native waiters expect relatively little according to European ideas. Never overpay. Trust to your servant not to do this, but warn him.

When travelling through plague-infected districts, the servant should not be allowed to frequent the bazaars.

### Maps

INDIA is only partially surveyed on a very large scale, but adequate maps exist for the main thoroughfares likely to be used by motorists. The most general chart is the Indian Government map of India, thirty-two miles to the inch, in six coloured sheets; size complete, 84 by 78 inches; price in sheets, 12s.; or mounted in four parts in one case, 32s. 6d. It is true it gives railways, canals, main and minor roads, but for very detailed work it is practically useless. Other official charts are on the scale of sixteen miles to the inch—plain—of greater value, but also not of sufficient detail. Some Governments have extensively surveyed in part on the scale of four miles to the inch; the sheets, in colours, are somewhat large, but can be pieced together and mounted. They cost a few rupees each. Such maps can, on notice, be supplied by the Car Touring and Information Bureau, 168, Piccadilly, W., or they can be obtained direct from the Government printers in each Province



or Presidency, or from the Survey of India Department, Calcutta.

Most of the Indian automobile clubs possess small route maps of their own, which they supply to affiliated members. Motorists, on arriving in India, would do well, therefore, to write to the secretaries of the various clubs of repute and standing—such as the Southern India Motor Union, Madras; the Motor Union of Western India, Bombay; the Automobile Association of Bengal, Calcutta; and the Automobile Club of Ceylon, Colombo. Several cities have small clubs of their own—at Nagpur in the Central Provinces the motorist will obtain the very best local advice and guidance from Mr. Alfred E. Joyce, of the Public Works Department. In all cities the subscription is trifling, and the club places at the disposal of the new members all the information it has collected.

The Automobile Association of Bengal is especially energetic in the preparation of large-scale motoring maps, which are intended to cover the whole of the Presidency—a very difficult one from the motor standpoint.

Finally, it may be repeated, no maps can be too good for the motorist in India, as he needs to know the exact location of the dāk bungalows, the river bridges, the unbridged rivers where the crossings are difficult, and those where they are passable. Such maps also give the main roads with pucca metalling—the best and almost the only ones from the motorist standpoint—the impassable roads, and the roads under construction which will be fit for motor-cars.

**Telegraph Rates**

## INLAND (PRIVATE AND STATE) TELEGRAMS

Class	No of Word	Rate	Each Additional Word
Express	12	Rs 1 1 0	Rs 1 0 2
Ordinary	12	0 6	0 1

THE address is charged for. The operators are practically all natives, not highly educated, and it is vital to write legibly, or mistakes are certain.

The telegraph system is fairly well developed in India, but there are immense tracts of country without either wires or stations. Sometimes one may have to send twenty or thirty, and even forty, miles to an office. It is nearly always possible to telegraph from a railway-station, but as railway messages naturally take precedence of private communications, delay is usually certain.

## FOREIGN (PRIVATE AND STATE) TELEGRAMS

	PER WORD	
	Private	State
	Rs 1	Rs 1
All countries in Europe (except Russia and Turkey)		
Via Turkey	1 6	—
Teheran	1 8	0 14
Suez	1 8	0 12

Telegrams can be redirected to a second address. The full inland rate, according to the class of the telegram, is charged for redirection.

### Postal Rates

AS to postal rates, the ordinary rate for letters posted in India to a local address or to Ceylon is a half-anna. Buy the stamps in one-rupee books of thirty-two half-anna stamps each; it is handier in a hot climate and cleaner. Local post-cards are a quarter-anna each. Letters heavier than a tola are one anna each.

Letters and postcards to the United Kingdom, and all the British possessions coming under the Imperial Penny Postage Scheme, are one penny each per ounce.

Money orders may be sent from almost any post office, also telegraphic money orders. Goods from large towns may be ordered by the value payable or "cash on delivery" system through the post office.

### Coinage

THE coinage is simple. Gold, silver, nickel (one anna), and copper coins are in current use, but in values of the rupee above five (5, 10, 20, 50, 100) paper-money is very extensively employed. As, however, these notes are issued by different banks in different districts, they are not always accepted at face value throughout India, most presidencies and provinces discounting slightly the issues of others.

The current standard of value of the rupee is fixed by Government at 1s. 4d. Fifteen rupees go to a sovereign. This and the half-sovereign are the gold coins chiefly in use. Occasionally one meets the old gold mohur, whose value is about £1 9s. 2½d. The rupee is divided into sixteen annas, each worth a penny; and lately there has been introduced a nickel anna, with milled edges. It is much appreciated. The copper anna is no longer coined, and is little to be met with. The divisions of the rupee in current use are the half, the quarter, and the eighth—all silver coins. The anna is divided into four pice, worth one farthing each, and each pice is divided into three pie, twelve pie thus equalling one anna. Pice and pie are both copper coins. These small values, with which the European has little to do, are expressed in subdivisions of the anna as follows:

One anna = 4 pice = 12 pie = 1d.

Half-anna = 2 pice = 6 pie = ½d.

Quarter-anna = 1 pice = 3 pie = ¼d.

As a rule, the motorist will be well advised not to accept change below the one (nickel) anna, as the coins are often filthy and prolific in disease germs. When such change is tendered, one simply does not take it up—that is all. At the same time, one should be well provided with abundant relatively small change, as large values of the rupee are not easily cashed in country districts, and heavy discount is often demanded by shopkeepers and others for doing so.

For larger amounts it is best to take circular

notes—such as those issued by Messrs. Cook and Son—or letters of credit, which are supplied by Messrs. King, King and Co., Bombay. Such letters and notes can be presented to the many agents and correspondents of the firms, who also undertake to receive and forward letters to any destination. Or the traveller can give as his address simply “Post Office, Bombay.” The authorities will, if advised, forward all letters promptly and carefully to him as he moves about.

### Phrases for the Motorist

AS there is no doubt that the motorist in India will at times need some Hindustani phrases, a small selection is appended which may be of use to him. *They are to be pronounced as they are written.* He ought at the same time to buy a little booklet published in Bombay (one rupee) by the *Times of India* press, and entitled “How to Speak Hindustani in a Month” This will give him an enlarged vocabulary, even if the phrases it also contains are naturally of less direct use to him.

Hindustani is practically the *lingua franca* of India. There are other languages, such as Gujerati, which have an immense hold on certain districts; but a knowledge of Hindustani will make one understood almost everywhere, since the differences of expression are not so dissimilar that they prevent even the humblest individual from comprehending at any rate the drift and intention of the person addressing him :

1. . . . ko konsā rāstā jātā hai ?  
Which is the way to . . . ?
2. . . . yāhān sé kiṭni dūr hai ? . . . yāhān sé kiṭni mil hai ?  
How far is it to . . . ? How many miles is it ?
3. . . . kahan hai ?  
Where is . . . ?
4. Sidhā chalā jāun ? (or) kayā mujhé sidhā jānā chāhiye ?  
. . . . rāstā pāhārī hai ? Yā humwar ?  
Do I go straight on ? Is it hilly or level ?
5. Mujhé (bayén) hāth mūrṇā chāhiyé . . . (dayen) ?  
Do I turn to the left . . . right ?
6. 7. *Pahilē* mor pār *bayén* hāth mūrūn ?  
*Dusré* dayén  
*Tisrē*  
Do I take the first . . . second . . . third turning to the  
left . . . right ?
8. Kaya sarak (achhi) . . . (khārāb) . . . (khasi) . . . hai ?  
Hān. . . . Nahīn.  
Is the road good . . . bad . . . fair ? Yes. . . . No.
9. Mujhe (khané kó) . . . (pinai kó) . . . (mākān) . . .  
(pétrol) . . . (pānī) . . . kāhān mil saktā hai ?  
Where can I get food . . . drink . . . lodging .  
petrol . . . water ?
- 10-12. Sab sé qārib (dāk bānglā) . . . (hotel) . . . (mākān) . . .  
(tār ghār) . . . (dāctār) . . . (lohār) . . . (hāwāghārī  
kā mārāmāt kā kārkhānā) . . . (dāwāī khānā) . . .  
kāhān hai ?  
Where is the nearest dāk bungalow . . . hotel . . . house  
. . . telegraph-station . . . doctor . . . blacksmith  
. . . motor repair shop . . . chemist ?
13. . . . kāhān biktī hai ?  
Where can I buy ?
14. Yeh (pāighām) . . . (tār) . . . (khāt) . . . (place or person)  
. . . . laī jāō.  
Take a message . . . telegram . . . letter . . . for me to . . .
15. Iskā kāyā dām hógā ?  
How much will it cost ?
16. Yeh (khāt) . . . (tār) . . . koi laī jā saktā hai ?  
Can anyone take a letter . . . telegram . . . for me  
to . . . ?

- 17-18. Mūjhé ék (*ghórā*) . . . (*bāyl*) . . . (*ék*, coolie) . . .  
           *dó* (*ghóré*) . . . (*bāyl*) . . . *dó* [hāwāghārī.  
           tin (*ghóré*) . . . (*bāyl*) . . . *tīn*

*chār*  
*pañch*  
*chhē*  
*sāth*  
*ath*  
*naó*  
*das*

kó kháinchné kái wásté chāhíyén.

I want a horse, two horses, three horses { to push the mo-  
           an ox, two oxen, three oxen           tor-car to . . .  
           four, five, six, seven, eight, nine { to pull the motor-  
           ten coolies                               car over the river.

19. Ís dāryá ká kói púl bhí hái? . . . kāhān hai?  
     Is there any bridge over the River J—? . . . where is it?
20. Dāryá mēn kói kīstī bhí chālī hai . . . kāhān hai?  
     Is there a ferry over the River J—? . . . where is it?
21. Dāryá hāhín pāyāb bhí hai? . . . hāhān hai?  
     Is there a ford over the River J—? . . . where is it?
22. Sáb sé qārīb rail kā station kōnsā hai? . . . Kó āb daorī  
     ghārrī káb jāigī?  
     Where is the nearest railway-station? . . . (When is the  
     next train to . . .?)
23. Hīnyā pár íntāzār káró yāh kói (sāhāb) . . . (hāwāghārī)  
     . . . gúvrā tó mūjhé khābār déó.  
     Wait here and let me know when a European . . . a  
     motor-car . . . passes by.
24. Agár kói sahab mīlāi tó úsé rók ló āúr mūjh sé mīlné kó  
     kāhó.  
     Stop the next European and ask him to come and see me.
25. . . . (*place*) . . . ké wásté máirāi líyé ék rāhbār dhōondó.  
     Find me a guide to . . .
26. Kāyā únhan kói māhsúl bhí dénā hai . . . kītnā . . .  
     kāhan?  
     Are there any tolls to pay? . . . how much? . . . where?
27. Kāyā jāti āúr wāpīs āti donó dáfé dénā hai?  
     Do I pay both going and returning?

28. Káyā mén yāhān āj qáyām kár sáktā hún? . . . káyā  
mújhé íské kúchh déná pāringā? . . . kiskó?  
Can I camp here? . . . must I pay anything for doing  
so? . . . to whom do I pay?
29. Yāhān qáyām kárné mén kói andeshā tó nāhín? . . . káyā  
āchhí qáyām-gāh hai?  
Is it safe to camp here? . . . is it a good camping-ground?
30. Yāhān kāhín qārīb pānī bhī hai? . . . káyā yēh píné ké  
qābīl hai?  
Is there water near here? . . . is it fit to drink?
31. Káyā túm máirai líyé kúchh (pānī) . . . (khānā) . . .  
(rōtī) . . . (múkhhan) . . . (dúch) . . . (mewāh) . . .  
(múrghī) . . . (múchhlī) . . . (chae) . . . (qéhwā) . . .  
(sārāb, or whisky) . . . (khārā pānī) . . . (múttī kā  
tāil) lā sákté hó?  
Can you go and get me some water . . . food . . . bread  
. . . butter . . . milk . . . fruit . . . chicken . . .  
fish . . . tea . . . coffee . . . whisky . . . soda-water  
. . . lamp-oil?
32. Mújhé kāl súbhā (pānch) . . . (chhé) . . . (sāth) . . .  
(āth) bājé jāgā dó.  
Wake me at five . . . six . . . seven . . . eight o'clock  
to-morrow.
33. Mújhé kāl súbhā (sārēh pānch) . . . (sārēh chhé) . . .  
(sārēh sāth) . . . (sārēh āth) bājé jāgā dó?  
Wake me at half-past five . . . six . . . seven . . . eight  
o'clock to-morrow.
34. Súbhā kí chae mén . . . (time . . . use the numeral)  
. . . bājé pīyūnga.  
Bring me my early cup of tea at . . .
35. Hāzri . . . (time . . . use the numeral) . . . bājé táyār  
rākhho.  
*Tiffin*  
*Khānā*  
Prepare breakfast . . . tiffin . . . dinner at . . . (. . . hour).
36. Gārām ghúsāl . . . (time . . . use the numeral) . . . bājé  
táyār kāró.  
*Thāndā*  
Prepare my hot . . . cold . . . bath at . . . (. . . hour).
37. Gāriwāllā, sárak sé ék tārāf hó jāó (or) rāstā chhóró.  
Get out of the way there, driver.



38. Jaldí káró āūr zārā hāth pāon hīlāó.  
Be quick and move yourself.
39. Bāyén hāth chāló. Ēk tārāf hó jāó. Zāyādā khábār  
dār hó jāó.  
Dāyén  
Keep to the left . . . right . . . turn aside. Be more  
careful.
40. Āūr bhī dēwār ké sāth sāth . . . sárāk ké kīnāré jāó.  
Go closer to the wall . . . side of the road.
41. Āpné ghōrái (ghórón) . . . bāyl (báilón) . . . bákri  
(bákríyón) . . . jānwār (jānwārón) kí ālhtāyāt rākhó.  
Look after your horse(s) . . . ox(en) . . . goat(s) . . .  
animal(s).
42. Sáb sé qárib (pāhrāwāllāh) . . . (kótwālī) . . . (múgístráte)  
. . . kāhān hái?  
Where is the nearest policeman . . . police-office . . .  
magistrate?
43. Maíraí líyé ék ghārrí (ghórā) láí āó . . . mén ghārrí pár  
(ghórái pár) jānā cháhtā hún.  
Fetch me a carriage (horse) . . . I want to drive (ride) to . . .
44. Ēk dhóbān (dhóbí) kó búlá lāó.  
Fetch me a washerwoman (man).
45. Kāyān túm yéh kāpraí dhó kár mújhé (āj rāt) . . . (kāl)  
. . . (pārsón) dé sákté hó?  
Can you let me have these clothes washed by to-night  
. . . to-morrow . . . the day after to-morrow?
46. Kāyā túm ís khóché kó fōrūn . . . jīñí jaldí múmkín hó  
. . . ráfōó kúr sákté hó?  
Can you sew me this rent at once . . . as soon as possible?
47. Kāyā hāwāghārrí táyār hāi. Hām (*pāunch*, mínút) . . .  
(ék ghāntái) men ráwānā hóngái. *dās*  
*tis*  
Is the motor-car ready? We start in five, ten, thirty  
minutes . . . in an hour's time.
48. Tāmām āsbāb khábārdārí sé bāndhó. . . . Ín (páyālón)  
. . . (gílasón). . . (bótlón) . . . kó dhó ló.  
Have everything packed with great care. . . . Wash these  
cups . . . glasses . . . bottles.
49. Mén ís āsbāb kó báyl gārrí mén . . . raíl mén . . .  
(*place*) . . . bhéjné cháhtā hún.  
I want this luggage, sending by cart . . . by train . . .  
to . . .

## THE NUMERALS.

<i>Spelling.</i>	<i>Pronunciation.</i>	<i>Spelling</i>	<i>Pronunciation.</i>
1 ek ...	... ake.	12 bàrà ...	... baras
2 do ...	... doe.	13 tèra ..	... tare-ar.
3 tun ...	... teen	14 chàoda ...	... chowdar
4 chàr ...	... char.	15 pandrá ...	... pundrar.
5 pàrch ...	... parnch.	16 sola ...	... so-lar
6 chhe ...	... cher.	17 satrà .	... sut-rar
7 sàth ...	... sart.	18 atàra ...	... ut- <i>ar</i> -er.
8 àth ...	... art	19 unis ...	... ooneece.
9 nàò ...	... now.	20 bis ...	... beece.
10 das ...	... dus.	25 pachis .	... percheece.
11 igàra ...	... e-garar.	50 pachàs .	... percharce.

100 ..	... ..	soo.
1,000	... ..	huzzar.
100,000	... ..	lakh.
$\frac{1}{4}$ ...	... ..	pow.
$\frac{1}{2}$ ...	... ..	ardar.
$\frac{3}{4}$ ...	... ..	powny ake ( <i>lit.</i> , "1, less $\frac{1}{4}$ ")
$1\frac{1}{4}$ ...	... ..	serwer ake.
$1\frac{1}{2}$ ...	... ..	sar-y ake, or dare.
$2\frac{1}{2}$ ...	... ..	ar-eye.

## Handy Words

	<i>Relative</i>	<i>Interrogative.</i>
Now—ubby.	When—jub	When?—kub?
Here—idder	Where—jidder.	Where—kidder?
Like this—ice-er.	Like which?—jise-er.	How?—kise-er?
This many, this much—itnar.	As many, as much—jitnar.	How many? how much?—kitnar?
Of (poss.) ...	... ker.	From ... .. see
To, for ...	... ko.	This .. . yeh.
By ...	... neh.	These . . . yea
In ...	... meng.	That .. . woo.
On ...	... per.	Those ... . way.
For ...	... wasty	Of these . . . inker.
With ...	... ke sart.	Of those .. . oonker.

This ...	Yeh.	from that,	
for this ...	is wasty.	or him . .	oos see.
from this ...	is see.	with , that,	
with this ...	is ke sart.	or him .	oos ke sart.
to this .	is ko	to that, or	
of (belonging		him ...	oos ko.
to) this ...	is kar.	of that ( s),	
on this ...	is per.	or his ...	oos kar
in this ...	is meng	on that, or	
That, he, it ..	Woo.	him	oos per.
for that, or		in that, or	
him ..	oos wusty.	him .	oos meng.

### The Camera on the Car

AS most motorists will take a camera, a few hints may be of use. Both films and plates—particularly the former—suffer from the great heat and damp. They should be packed in airtight metal cases. Fresh supplies, save of the newest patterns, are easily obtainable everywhere in the large cities. Messrs. Clifton and Co., of Bombay, 54-58, Meadows Street, are good photographic outfitters, and their development work is excellent. Rates for development are very reasonable, being usually about two annas per half-plate film or plate, and less for those of smaller size. It is advisable, under all circumstances, to develop negatives as soon as possible after exposure.

Great care is needed in exposing, if being requisite to shut down in the full sunshine as much as possible. On the other hand, light, either in the early morning or in the early evening, is not so diffused as in Western climes, and a longer exposure is then necessary. The sun is very penetrating. Keep the camera always covered up, or

fogging may be common. The camera should be carefully packed during transit to avoid jars, which are frequent in consequence of the great road unevenness.

The Oriental does not really like being photographed, but little objection is ever made, particularly if a small *douceur* be given. A couple of annas is generous recognition.

### Hints to Sportsmen

THERE is heavy duty on firearms imported into the country, and special permission from the Indian Government is necessary to bring in rifles sighted over 300 yards. Rifles and guns of various kinds may be hired in the large towns, and cartridges are supplied by various firms.

Although sport is easily obtainable in India the novice will do well to consult those on the spot. Big-game shooting requires halts of two to three weeks in jungly country and assistance from local officials, which is not difficult to obtain if a personal interview is sought. In the cold weather the tanks and marshes along the main roads—the further from the railway the better—abound with wild duck, teal, and snipe; while partridge, quail, and grouse are plentiful in the more open country. Pea-fowl may not be shot near villages and in some native states. Antelope (black buck) and gazelle (*chinkara*) are frequently seen, and afford good sport in the plains. Good fishing is obtainable in most of the rivers, and the angler would do well to seek the advice of the local experts.

The Game Laws vary in different provinces and native states, the fee for a shooting licence for large game being Rs. 15 to Rs. 60. Except in one or two localities small game and antelope may be shot in open country without a licence, but this does not apply to native states such as Mysore and Cashmere.

## PART II

### The Roads in India

GENERALLY speaking, India is a flat country, with straight but often shady roads stretching for miles without a turn, yet here and there the motorist strikes the hill-country—Ghats, or mountains—which possesses a special charm of its own. Thus it is a stiff but beautiful climb over the Ghats to Poona and up to Mahableshwar, just off the Bangalore Road; the road from Kalka to Simla is quite excellent, and winds up over lofty hill after hill; it is possible, *if permission be obtained*, to motor up to the outskirts of Darjeeling from Siliguri (itself rather inaccessible) along a delightfully picturesque lane—for the use of which there is a perpetual fight with the tiny railway—amid the densest of jungly tropical vegetation until the higher altitudes are reached; in the south, in the Nilghiri Mountains, the rapid corkscrew rise to Ootacamund will tax the ability of any car, and more than charm the traveller's mind and eye, while the lofty passage from the Punjab to Cashmere is both a test of endurance and an abiding memory of pleasure and gratification.

Still, it is not hills which the motorist will go to India to see, but the plains, with their dense and

varied population ; their historic places of interest ; their innumerable ruins and their fascinating cities ; their broad watercourses, in which run more or less anæmic rivers ; their picturesque life of the roads ; their little-known existence of the people ; their quaint and attractive vegetation, varying from tropical to sub-temperate. He will never be lonely if the human form in some guise or other can dispel loneliness, but he will, nevertheless, not see many white faces outside the cities, though when he does they will more than compensate in cordiality of welcome for any paucity in their number.

Now, it is the fashion to depreciate the Indian roads, and it is perfectly true they vary most materially. Some Provinces, States, or Presidencies have excellent roads in good number, well maintained and interconnecting ; others have certain stretches of good roads which end abruptly—lead to one town, perhaps, and no further—and a few are very poorly developed. Of the roads in each Presidency it may for the moment suffice to say that there is an all-round steady improvement. Probably the temporary falling off in the rate of road improvement and development was due to the lack of capital and the heavy outlay on the competing railways ; but now there is a general realization of the value of the one means of communication as an adjunct to the other, and, moreover, motor traffic is greatly favoured in practically every case by the British authorities.

It is advisable for the visiting motorist to keep to the trunk roads, although, if he finds they are not always continued to his would-be destination, he can, with his car, easily and cheaply, take the

train over the intervening stretch of country and start again further on. Perhaps the tendency of officials is not unnaturally to be optimistic regarding the roads with which they are directly connected—discount enthusiasm a little! Yet, of course, districts vary in so big a country as India, and some secondary roads here and there are quite passable. Each motorist should make careful inquiries in India before he starts, and as he progresses, as to what he may expect. The only difficulty is that so few motorists in India, even of European origin, know anything outside their immediate districts. They seldom make long runs, and often have a lurking contempt for those who do. They can guide up to one hundred, or at the most two hundred, miles, but outside this distance they absolve themselves from the responsibility of ignorance by saying the Government of India ought to make a proper large-scale survey, such as does not now exist. Still, much reliable information can be obtained by inquiries addressed to the various Provincial or Presidential Public Works Departments, which are, as a rule, most enlightened bodies, and always ready to be helpful to the motorist as regards the condition of the roads, the bridging of the rivers, and the existence and maintenance of the *dāk* bungalows, for all of which they are responsible. A list of districts traversed by the routes described, and of the telegraph offices along the roads, is given on p. 83, and the tourist is advised when in difficulty to communicate with the district officers mentioned, who are in a position to give help or advice. Temporary affiliation to the various excellent Indian Motor Unions is



also strongly recommended ; they are most helpful and informing organizations.

There are many Indian roads which suggest those of France—long, straight, and white, with avenues of trees (in India, of all sorts) stretching for miles. Still, India has so much more life and beauty. There are everywhere, in the north and centre—and even in the driest time of the year—masses of foliage, which afford shelter when the summer temperature is almost at fever-heat, and which in winter lend the greatest charm to the landscape. Bird-life is prolific—the crow and the dove are ubiquitous. The grey squirrel, abounding in many districts, will frequently rush across the road, and often meet its end under the wheels of the car, while the monkey, particularly in Southern India, can be met almost in troops.

The greatest drawback, even on the main roads, is the absence of bridges : time after time cars must be laboriously ferried over rivers and creeks, or drawn across fords, which, though quite possible, none the less inspire some trepidation. Progress is, therefore, often slow, and the effort even to effect this must, in the heat of the day, be arduous. Still, native assistance is always forthcoming, and it is, as a rule, very cheap.

If a general specific characterization of the roads be needed, it may be said that in the great plains of the north they are the best and most replete with antiquarian and historic interest ; in the Bombay Presidency, and in the North-West generally, they are almost as good, and scenically more attractive ; in Bengal they are poorer, and, on the whole, the dense life of the people lays most

claim to consideration ; in the Centre, motoring is rougher, but then much more off the beaten track ; and, finally, in the South, the thoroughfares, while in the aggregate less solid and finished, even in favoured districts, such as in Madras itself, parts of Mysore, and near Ootacamund, possess more all-round variety of charm, both as regards natural surroundings and the many-featured existence of the native races.

As to the surface, districts vary greatly. The trunk roads are mostly macadamized, but possessing in many cases the dreadful Indian fetish—an earth banking on either side, which in dry weather powders into dust, and in wet renders the roadway a miry bog. Mrs. Herbert Lloyd found the surface over most of the routes she followed, save in the Punjab, “generally indifferent and often very bad. ‘Irish’ bridges, boat bridges, stone causeways, and unbridged rivers make long journeys a day very hard work or impossible.” Never, therefore, try to do too much, to cover too great an extent of ground in any one day.

There is always heavy traffic on the roads near the towns, and, even in the essentially country districts, one is constantly meeting or passing long strings of country carts. Nowadays the native is getting to know the motor-car, but he does not understand it, and if he is in charge of animals, does not always appreciate it. Still, towards the motorist, as an individual, there is usually a more or less kindly and helpful feeling. It is true that in places there is a certain amount of stone-throwing. This is principally due to the general feeling of unrest, which expresses itself in out-of-the-way

places in resentment to a domineering form of white civilization, but it is also partly due to curiosity—on the principle followed by the little boy who cut open the ball to see how the air got inside. In connection with this point Mrs. Lloyd's testimony is of interest:

"India is so thickly populated that you cannot stop for five minutes on an apparently deserted road without a crowd collecting round you. As far as our experience went, the natives were most civil and obliging, and would fetch water or milk, or anything they had.

"The Northerners are much more intelligent than the Southerners, and are altogether a finer race. In the South the women seem absolutely stupid, and have no curiosity. They would take no notice of the car, or even trouble to get out of the way; while the men would sometimes run a mile when they saw it coming, or crowd round it, and want to touch everything. Very few had ever seen a car before, and in some of the more out-of-the-way places had never seen a white woman. They called the car 'Shitan,' or 'the Devil.'

"They are more used to cars in the North, as many of the officials of the Public Works Department use them for their work."

Road-repairing is irregular and erratic. At present there is in some districts, it is understood, a fixed procedure, one mile of roadway being repaired in a certain term of years, irrespective of its actual condition. This would seem to be the case in the Punjab, judging by the appalling state of the roads near the cities of Lahore, Amritsar, Ferozepore, and Peshawar. It does not seem to

have struck the local or provincial authorities that repairs should be in proportion to the traffic, and that the width of the metalled portion of the roadway should also be so proportioned.

Many motorists in India consider that, comparatively speaking, tyres last longer than at home. This is due to the relative absence of destructive factors, such as nails, glass bottles, etc., from the metalled highways. There is, however, one very objectionable feature—the cast bullock-shoe, which often, having an iron edge like a razor, can gash a tyre in almost irreparable fashion.

Finally, the motorist should be warned that in the Bombay and Madras Presidencies there exists the old-fashioned and irritating system of raising funds for the upkeep of the roads by the establishment of toll-houses every few miles. The usual charge is eight annas. The sum thus officially collected is a very considerable one. Motorists would do well to carry small change with them.

### **Bombay Presidency**

THE roads in this Presidency vary greatly. In and around Bombay they are very good, but far from the city they deteriorate. The exits from Bombay inland are, however, restricted, and this probably accounts for the poor road developments, since motorists use only the main trunk thoroughfares. The chief exit from Bombay—which is on an island—is over the Sion Causeway.

The roads which would probably be most used by visitors to India travelling by motor-car are the Bombay-Agra road and the road from Bombay to Poona, and thence to Bangalore and other places. The former crosses the large unbridged Kalyan creek some thirty-three miles out; but designs for a bridge, which is expected to cost about £300,000, are now in hand. It is impossible to say when the Government will be able to spare funds for the work, and in the meantime motor-cars must be conveyed across the creek in a country ferry-boat.

Round Poona the roads are excellent, the thoroughfare to Mahableshwar, the Government summer station, being about as good as any in England. There is some very stiff climbing in the Ghát district, but the scenery is most picturesque. Motoring on the Mahableshwar roads, where toll-stations exist, is only allowed between sunrise and sunset. Indeed, certain specific rules are in existence on the main ghát roads which must be very carefully observed. A ghát road means a road constructed on a gradient on the sides of a mountain or hill, and its beginning and end are usually marked by large notice-boards.

*On all such roads motorists should proceed with special caution.*

These are the official regulations:

No motor vehicle shall travel by night—*i.e.*, half an hour after sunset to half an hour before sunrise—on any of the ghát roads between Poona and Mahableshwar, or on any other ghát road on which, with the previous

sanction of Government, the district magistrate has prohibited night travelling by notification in the *Government Gazette*, and by erecting notice-boards at the top or bottom of the hill.

*Exception.*—Should a motor vehicle break down on any road on which night travelling is prohibited, the driver, if unable to accomplish his journey before nightfall, may proceed after executing the necessary repairs, but shall halt at the first police-station he comes to after dark, and there give his name and the number of his car, and a statement of the reasons why he is travelling at that hour, and shall drive with great caution.

Motor vehicles shall, where practicable, pass all animals or vehicles drawn by animals on the outside, in whichever direction such animals may be proceeding.

The driver of a motor vehicle shall, in passing animals, allow as much space as the width of the road permits.

Hired vehicles must stop on the outside of Mahableshwar. Private vehicles are allowed to convey the owner to his residence, and take him back at the beginning and end of his visit only.

The ghát route to Matheran is closed to motors, as is also usually the Kelghar Ghát between Mahableshwar and Sátára.

No motor vehicle is allowed to travel on the Pasarni Ghát (*i.e.*, the one between Wai and Panchgani) before 7.30 a.m.

Appended is the list of gháts affected by the above regulations ; the spelling and accents are official :

- |                             |                                   |
|-----------------------------|-----------------------------------|
| 1. Poona-Bangalore Road.    | 9 Malhárpeth - Pandharpur Road.   |
| (1) Khambátki Ghát.         | (1) Urul Khind.                   |
| (2) Limb Khind.             | (2) Shámgaon Khind.               |
| (3) Kodoli Khind            | (3) Taras Khind.                  |
| 2 Poona-Sátára Road         | (4) Jhare Khind.                  |
| (1) Adarkí, or Salpa Ghát   | 10. Sátára-Pandharpur Road.       |
| (2) Katraj Ghát.            | (1) Triputi Khind                 |
| (3) Diva Ghát.              | (2) Wardhangad Khind              |
| 3 Wáthár-Mahábleshwar Road. | (3) Mahumangad Khind              |
| (1) Shirgaon Khind.         | (4) Dhuldeo Khind.                |
| (2) Pasármí Ghát.           | 11. Dahi wádi - Shingnápur Road : |
| 4 Sátára-Mahád Road         | (1) Bombaldare Khind,             |
| (1) Kelghar Ghát            | near Wávarhire.                   |
| (2) Fitzgerald Ghát.        | 12. Shingnápur Phaltan Road       |
| (3) Ambenáli Ghát.          | (1) Bhaváni Ghát                  |
| 5. Karád-Chiplun Road       | 13. Sátára-Párlí Road             |
| (1) Kese Khind              | (1) Tunnel Ghát.                  |
| (2) Kumbhárlí Ghát.         | 14. Sátára-Shendra Road :         |
| 6 Mahád - Pandharpur Road   | (1) Tunnel Ghát                   |
| viá Bhor                    | 15 Sátára to Satára Road          |
| (1) Hirdoshi Ghát.          | Station                           |
| 7. Sátára-Tásgaon Road      | (1) Pádli Khind.                  |
| (1) Nhávi Ghát.             | 16 Poona-Bombay Road              |
| 8 Karád-Nagaj Road.         | (1) Bhor Ghát.                    |
| (1) Surli Khind             |                                   |
| (2) Renávi Ghát.            |                                   |

For the motorist who likes to make short, agreeable excursions from a fixed base, Poona—in itself a delightful town—is absolutely the best centre possible. An hour's run brings one to the splendid stretch of road between Talegaon and Lonauli, with the Karla Caves to visit *en route* and the gháts to see a little further on. In a southward direction is a splendid road to Sátára, which extends into the Kolhapur country, with a

charming deviation to Mahableshtar. Ahmadnagar is a comfortable day's outing, and there are numerous other shorter excursions, such as Karakwasla.

There are a number of cars in Karachi itself, but motoring in this district is not possible to any appreciable or satisfactory extent.

### Bengal Presidency

MOTORING is not good in Bengal off certain very clear and defined routes, such as the Grand Trunk and the road from the capital to Cuttack and Puri, and a few excursions round Calcutta. As a general rule it can be stated that all first-class metalled roads which are bridged and drained throughout are fit for motor traffic, and that those which are not bridged and drained are, in most cases, also fit for it, except from June 15 to October 15, the rainy season. Still, the latter had best be avoided by all save those conversant with Indian life and methods, as there are innumerable minor difficulties.

Taking, therefore, the recommendable roads, they are as follows :

The Grand Trunk from Calcutta to Benares.

Calcutta to Cuttack, Puri, and Bhubaneswar by Ulubaria.

Short runs round Calcutta—to Diamond Harbour and to Canning on the south, to Barrackpur on the north, to Basirhat on the east, and to Jagatballabhpur on the west.



It is extremely difficult to motor from Calcutta to Darjeeling, as the roads are very bad—simply mud, and generally under water for about six months in the year. It is, indeed, unusual for them to be dry much before January. Nevertheless, a route is given hereafter for the benefit of the adventurous motorist, who must be warned that, even if he reaches Siliguri, the starting-point of the hill railway, he may not obtain permission to climb up to Kurseong and Darjeeling, as the road is very difficult, being continually intersected by the railway-line and reversing stations, while the gradients are very severe. Still, Darjeeling is distinctly worth a visit, as the view, on a clear day, of the distant Himalayas is probably, of its kind, the finest in the world.

The road traffic in Bengal is probably the greatest of any part of India, so the most extreme caution in driving must be observed. The native, too, is perhaps the least well disposed.

It may be added that many short excursions can be made by a motorist traversing the Grand Trunk Road—for instance, he can go from Burhi to Hazaribagh, and then rejoin the main road by an equally good stretch from that town to Bagodar. There is a fairly good and level run from Sasaram to Arrah. The car could also be sent by train to Patna or Muzaffarpur, where there is a good deal of motoring in and about each city, but it is not possible to reach either place in comfort by road.

### Madras Presidency and Mysore

MOTORING in Southern India is quite good if the beaten tracks are followed. Difficulties solve themselves easily, and no one need be deterred. Not only are there some excellent roads in Madras Presidency—the city itself contains some magnificent long thoroughfares—but in Mysore great care is taken to insure good main routes. There is, as a rule, very heavy traffic on the chief roads, which renders fast driving inadvisable, quite apart from the existence of many “Irish bridges.” As a rule, rivers are not bridged, with a few exceptions. In the hill districts, notably in the Nilgiris, the gradients are very often severe and the roads are narrow and not protected; consequently, expert driving is vital, and the brakes of the car, which heat easily, should be carefully examined. The best main roads are from Madras to Katpadi, and thence to Bangalore and Mysore, whence it is relatively a short distance to Ootacamund, which lies at an elevation of 7,500 feet. From the latter place a journey could be made to Calicut by two good alternative routes, enabling the motorist to go by one and come back by the other. There are numerous possible excursions in the vicinity of Madras, where two or three days can be spent without traversing the same ground. The condition of roads in the Madras Presidency varies considerably. In the Kurnool, Cuddapah, and Bellary districts the larger streams and rivers are unbridged, and the scarcity of road metal in the black cotton soil country impedes progress.

In North and South Arcot nearer Madras the roads are very fair, and are lined with avenues of fine trees. Some bridges have been washed away, and reconstruction has been postponed. This is also the case in the Tanjore district in the south-east. There are few bridges over the rivers around Trichinopoly, but the roads are looked after. The red laterite roads of South Canara and Malabar are extremely good, and the large ferries in use near the mouths of rivers can transport cars without difficulty, though the crossings are sometimes tedious. Intending motorists would do well to join the South India Motor Union—particularly since this body, in addition to giving information on tours, can make arrangements as to the supply of petrol, which is not easy to obtain in Southern India. The natives are well disposed, although here and there there is some stone-throwing. It is, however, useful to recollect that the adult native of Southern India rarely smiles; this, however, should not be taken as indicating ill-will. The heat is much greater in this part of India during the winter months than in the north, and it is necessary, therefore, to watch most carefully the condition of tyres. In summer, when travelling over very hot roads, with the thermometer perhaps  $150^{\circ}$  in the sun,  $120^{\circ}$  in the shade, and perhaps  $140^{\circ}$  in the dust, it is quite conceivable that a tyre, heated additionally by the friction of running, may approach dangerously near the temperature of rubber vulcanization, and burst because of being no longer able to stand the pressure due to the high temperature of the air in the inner tube. Slow running through in-

habited places is imperative; some of the cities, such as Bangalore, are full of intricate thoroughfares. Toll-bars are not uncommon, the usual charge, as stated above, being eight annas.

The province of Mysore has a network of excellent roads, which connect all the Taluk as well as the district headquarter stations, and it is possible to motor easily from one end to the other. By the end of March the roads from the forest country and coffee plantations to the railway line are often cut up badly, owing to the passage of numerous heavily laden carts. When motoring after sunset, powerful head-lights should be used, as carts are frequently unyoked in irregular order on the road. Stones or logs used to prop the cart-wheels on inclines are often left there by careless cartmen. Forest roads are sometimes blocked by bamboos falling across, but these can be removed by coolies. The western portions of Mysore consist of hilly forest country, and superb views are obtainable. The eastern parts are flat and level as a rule. A special map, showing the chief metalled and bridged roads, is published on p. 198.

### The United Provinces

THE United Provinces are in advance of other parts of India as regards roads, and it is possible in suitable weather to travel by motor almost from one end of the country to the other. Practically all the metalled roads are suitable for motor traffic, and there are so many so-called "Trunk" thoroughfares—one, for instance, closely

following the line of railway to Allahabad, Cawnpore, Agra, Delhi, Meerut, Saharanpur, and another turning further north-east from Allahabad to Fyzabad, Lucknow, Sitapur, Bareilly, and Naini Tal. Jhansi is also easily accessible from the Great Trunk Road. For Rajputana, see Appendix F.

To show the network of roads, all of which can be recommended as suitable for motoring, a special map is published on p. 219. It includes no unmetalled routes, some of which, nevertheless, will be found at certain times of the year to be quite fair, even if going is somewhat heavy owing to the thick dust.

### The Central Provinces

THE Central Provinces possess many excellent roads. The roads officially regarded as in Class I. are very good, except in a few cases, where manganese traffic has cut them up. This, however, is being remedied. The roads are broad, without sharp curves, and a clear view can always be obtained for a long distance ahead. The moorum roads, or roads made of a species of sand, which compresses well on binding, are beautiful, and in the cold weather are better than the metalled roads. Traffic is not so great in the Central Provinces as in other districts.

The local administration is very sympathetic to the development of motoring, which is opening up the country, but, of course, funds for roads are only slowly forthcoming. In fact, the only road bridged throughout is the Nagpur-Jubbulpore

section. The Central Provinces are accessible from Gwalior or the United Provinces, but there is no good cross-country route from Bombay to Calcutta via Nagpur. There is a passable road south to Hyderabad. The noon winter heat is, perhaps, greatest in this part of India, but it is never unpleasant.

### Eastern Bengal and Assam

AT present most of the roads in East Bengal and Assam are hardly good enough for much motoring. As a matter of fact, with the exception of—

1. Portions of the Dimapur-Manipur road . . 136 miles
2. Gauhati-Shillong road . . . . . 63½ „
3. Shillong-Cherra road . . . . . 34 „
4. A few odd miles of roads within the municipal limits of a few of the towns,

all the roads in Assam are in embankments, and have an earth surface, which a few hours of rain even in the cold weather (the best months for these roads) make heavy for wheeled traffic, whilst during the monsoon period the mud is so deep as to make progress very difficult, even for draught cattle, and, in case of motor-cars, quite impossible.

As motorists from England are always wanting to get through to Burma from Assam with a view to continuing their journey to China or Siam, it will be well to note that the Silchar-Manipur and the Manipur-Kindat roads cannot be traversed by motor-cars.

At the same time, Assam deserves more than the

semi-depreciatory praise which it usually receives, and the time will come when the tourist will resort to it in increasing numbers. It is true that all visitors, particularly the motorist, and especially if he has few friends or letters of introduction, will have to "rough it" more than elsewhere, but many of the unmetalled roads are, in the dry season, quite passable, and the dāk bungalow system is well and carefully organized. The Assam Trunk Road is one of the best in the province, and there are a few side excursions into the hills, which will repay the most venturesome. The climate in the winter is delightful, and not over cold. In the rainy season Assam should be avoided by the motorist.

### The Punjab

ROAD development in the Punjab is, in view of the importance of the province, very backward, being about fifty years behind the times. The Grand Trunk Road is, however, very good, and is the main line of communication, running as follows: Delhi, Kurnal, Umballa, Ludhiana, Jullundur, Amritsar, Lahore, Gujranwala, Gujrat, Jhelum, Rawal Pindi, Attock, and Peshawar (in the North-West Province).

From Ludhiana to Lahore the Beas and Sutlej Rivers are not bridged, and the crossing in each case presents certain difficulties. The alternative route—Ludhiana-Ferozepore-Lahore—is only about twenty miles longer, and is excellent, with a bridge over the River Sutlej at Ferozepore.

Besides this main line of communication there are many other metalled roads, mostly offshoots from it, connecting up the various important towns in the province. Thus, roads run to Kalka, Hoshiarpur, Kapurthala, Pathankot, Kot Kapura, Faridkot, Shekhupura, Sialkot, and to Murree with the extension to Cashmere. These, with a few unimportant roads, make a total length of 1,000 miles in an area of 97,209 square miles.

Motorists will be able to ascertain the condition of these offshoots and details about them on their arrival at any of the main centres mentioned along the Grand Trunk Road. For the hill road to Simla travellers branch off at Umballa (Ambala), and for the hill road to Murree at Rawal Pindi.

The south-west of the province towards Multan is not provided with suitable roads for motoring, although in Multan itself there are motor-cars.

### **North-West Frontier Province**

**M**OTORING roads are few in the North-West Frontier Province, but the Grand Trunk is in good condition, and here and there side excursions are possible. Military exigencies compel the maintenance of several first-class routes, and it is quite possible to take a car into the Khyber, and also up to the Malakand Pass. The authorities must, however, be consulted, and their permission obtained.



### Hyderabad

**H**YDERABAD, though relatively inaccessible, is worth a visit from motorists with time at their disposal. Both Hyderabad and Secunderabad are excellent centres for motoring, there being fair runs in all directions; in some cases more than 100 miles can be covered on very good roads. It is only in the rainy season that the roads are not passable, as, being constructed of gravel and moorum sand, they are very soft in wet weather. The approaches to Hyderabad from the outside by road are few, the two best thoroughfares being the one from Nagpur, in the Central Provinces, and the military road from Madras. It is not possible to come in from any other direction. There are one or two other roads, but owing to there being no bridges over the rivers, and the surface being very rocky and not kept up at present, they are practically impossible for motors until within seventy to eighty miles of the city of Hyderabad.

Great stimulus is given to local motoring by the fact that His Highness the Nizam is an enthusiastic automobilist. He has himself twenty-six cars, a splendid garage built in the form of a quadrangle, with separate room for each car, and a total accommodation, if required, for thirty. The whole place is lighted by an electric installation; and the staff of fifty men, drivers and cleaners, and six native mechanics under the superintendent engineer, Mr. Wilfred H. Dolphin, does all its own repairs, though up to the present

there have been practically no accidents at all. Intending motorists, under the circumstances, will do well to apply to Mr. Dolphin for advice as to any local touring they may wish to make.

### Cashmere

AN ideal summer resort, which motorists can reach quite easily via Murree and Wazirabad, though the climb from Rawal Pindi is somewhat severe. There are fine level roads in Cashmere, and the motorist can be easily fitted out from Lahore.

### Travancore

THE southernmost native State in India with extensive forests and lofty mountains. Much money has been spent in improving the roads in recent years, building new bridges, and opening new lines of communication with British territory.

### Detailed Route Maps

VERY great care is needed in choosing routes in India, and for that purpose a number are appended, most of which can be recommended. They usually explain themselves and represent journeys in nearly every accessible portion of the country. The key-map (facing p. viii) will show that this is so. Of course, every motorist will make side excursions. Many will attempt to traverse country hitherto untouched by motorists. In that case careful local inquiries should be made in advance, from, if possible, Europeans, as natives have but an elementary idea both of distances and possibilities. It will be noticed that the coast route from Madras to Calcutta is not given. It does exist in very rough form, but is so intersected by river-beds and nullahs, while it is so much off the beaten track for everything, that it is not recommended.

It is, however, possible to reach Calcutta via Hyderabad, Nagpur, and Allahabad. Possibly most tourists will make the journey, or part of it, covered by Mrs. Herbert Lloyd, from Bombay to Agra, thence northwards to Cashmere, and finally down country to Calcutta. In any case, full details are given of this, and Mrs. Lloyd has supplied the following general criticisms, both of the

roads and their difficulties, and of the hotels and rest-houses and their accommodation :

"The Grand Trunk Road is the old highway of India. It stretches from Calcutta to Benares, from Benares to Delhi, and from Delhi to Peshawar" (Appendix E).

"From Bombay to Agra the Irish bridges, or stone watercourses, are many and tiresome, as if they are taken too fast axles and springs may easily be broken. They are especially bad between Palasni and Mhow, having very steep approaches and ascents, while the bottom is very rough. Many of the shallow Irish bridges cannot be seen until the car is within a yard of them. In this section of the journey the difficult or tiresome river crossings are at Kolsett Bunder, the Kadva, the Tapti, the Nerbudda, and the Chambal; the crossings at Sarangpur and the Parbatti River must be negotiated carefully. There are cold-season boat bridges or causeways over the Nerbudda and Chambal Rivers, but they are not erected until about the end of November."

"The roads in the Punjab—that is, from Lahore northwards—are considerably better than elsewhere, and fairly fast travelling can be done over the greater part. For several miles south of Peshawar, however, the road is intersected by bad dips, which require careful driving, especially if it is wet."

"As to river-crossings, the only really difficult one from Delhi to Calcutta is at Dehri-on-Sone. The river is about three miles wide, and the bank on the east side is about 4 feet higher than the ferry-boat, so that planks must be obtained up

## HOTELS AND DĀK BUNGALOWS 83

which to wheel the car. It is very awkward, and requires great care."

"Two miles south of Umballa there are two deep-sand river-beds, over the second of which the car must be hauled by natives. At Wazirabad the car must be entrained to cross the Chenab River, and if, *en route* to Lahore, the road via Jullundur is taken, the Beas River must be crossed by train."

"At all these crossings plenty of native labour can be obtained."

### Hotels and Dāk Bungalows

#### Bombay to Gwalior and Agra

Bombay	Taj Mahal Hotel	First class	—
Igatpuri	Dāk Bungalow	Fair	Supplies
Dhula	"	Good	"
Ajanta Caves	"	Fair	No supplies
Nardana	"	Very bad	"
Shirpur	"	"	"
Palasnir	"	"	"
Khurumpura	"	Fair	Supplies doubtful
Khal Ghat	"	Very bad	No supplies
Mhow	"	Good	Supplies
Indore	"	"	"
Dhar ..	"	"	"
Maksi ...	"	"	"
Sarangpur	"	Poor	Supplies doubtful
Guna ...	"	"	The mess of the Central India Horse may per- haps provide supplies
Gwalior ..	Musaferkhana (now an hotel)	Good	—
Agra ..	Laurie's Hotel	"	—
Fatehpur Sikri	Dāk Bungalow	Very good	Supplies

**Agra to Peshawar :**

Aligarh	... Dāk Bungalow	Excellent	Supplies
Delhi ...	... Cecil Hotel	"	—
Umballa	... Robson's Hotel	Fair	—
Ludhiana	... Dāk Bungalow	Excellent	Supplies
Lahore	... Nedou's Hotel	Fair	—
"	Charing Cross Hotel	Very poor	—
Wazirabad	... Dāk Bungalow	Poor *	Supplies
Gujarkhan	... " "	Very poor	No supplies
Rawal Pindi	... Flashman's Hotel	Good	—
Peshawar	... Alexandra Hotel	Very good	—
Amritsar	... Cambridge Hotel	Excellent	—

**Delhi to Calcutta :**

Delhi ...	... Cecil Hotel	Excellent	—
Aligarh	... Dāk Bungalow	"	Supplies
Mainpuri	... " "	"	Supplies doubtful
Cawnpore	... Civil and Military Hotel	Very fair	—
Lucknow	... Wurtzler's Hotel	Excellent	—
Allahabad	... Laurie's Hotel	Fair	—
Benares	... Miss Clark's Hotel	Excellent	—
Dehri-on-Sone	Dāk Bungalow	Good	Supplies
Gya ...	... " "	Fair	"
Burhi ...	... " "	Good	Supplies doubtful
Asansol	... " "	Poor	Supplies
Calcutta	... Grand Hotel (and many others)	Good	—
Hazaribagh	... Hotel	"	—
Darjeeling	... Grand Hotel	Excellent	—

**Rawal Pindi to Srinagar (Cashmere) :**

Rawal Pindi	... Flashman's Hotel	Good	—
Murree	... Several hotels	—	—
Dewal	... Dāk Bungalow	Fair	No supplies
Kohala Ferry	... " "	"	Supplies doubtful
Dulai ...	... " "	Small	"

\* The police bungalow is very good, but permission to use it must be obtained at Lahore.

# ROADS IN INDIA

85

## Rawal Pindi to Srinagar (Cashmere)—continued :

Dumel, or Dāk Bungalow		Large and new	Supplies
Mosaferabad		new	
Garhi ... ..	„	Large and new	„
Hatti ... ..	„	—	Supplies doubtful
Chagoti ... ..	„	Very bad	No supplies
Uri ... ..	„	Large and new	Supplies
Rampore ... ..	„	Old and dirty	Supplies doubtful
Baramulla ... ..	„	Large and new	Supplies
Srinagar ... ..	„	New and good	„

N.B.—Bread and soda-water are difficult to obtain in many of these dāk bungalows.

## Roads in India.

Provinces.	Metalled.	Unmetalled.	Total.
Bengal ... ..	4,419	48,648	53,068
United Provinces ... ..	5,848	24,941	30,789
Punjab ... ..	2,054	20,874	22,928
Burma ... ..	1,617	8,311	9,928
Central Provinces and Berar	2,748	2,582	5,330
Assam ... ..	144	7,803	7,948
Madras Presidency ... ..	18,340	5,433	23,773
Bombay Presidency ... ..	4,116	20,451	24,567
N.-W. Frontier Province	717	944	1,661
Coorg ... ..	144	199	343
Rajputana ... ..	1,314	2,326	3,640
Central India ... ..	1,994	468	2,462
Baluchistan ... ..	746	465	1,211
Military Works ... ..	1,003	1,059	2,063
Mysore (Native State) ... ..	1,700	3,305*	5,005
	(Provincial)	(District)	
Travancore (Native State)	486	389	875
Hyderabad (Native State)	—	—	1,777†
Indore (Native State) ... ..	142	—	142
Gwalior (Native State) ... ..	885	—	885

\* Many of these are metalled.

† Many of these are gravelled, but unmetalled.

**Government Telegraph Offices along the Routes****ROUTE I.—BOMBAY-PESHAWAR-SRINAGAR.**

Bombay, Byculla, Parel, Dadar, Kurla, Thana, Bhiwandi, Kalyon, Shahapur, Igatpuri, Devlali, Nasik, Maumad, Malegaon, Dhulia, Nardana, Shirpur, Dhar, Mhow, Indore, Dewas, Shajapur, Sarangpur, Pachor, Biaora, Goona, Sipri, Gwalior. Dholpur, Agra, Muttra, Hatteras, Aligarh, Ghaziabad, Delhi, Sonapat, Panipat, Karnal, Thanesor, Shahabad, Umballa, Rajpura, Ludhiana, Jullundur, Ferozepore, Lahore, Amritsar, Gujranwala, Wazirabad, Sialkot, Gujrat, Lala Musa, Jhelum, Rawalpindi, Hassan Abdal, Attock, Nowshera, Peshawar, Jamrud, Landi Kotal, Murree Baramula, Srinagar.

**ROUTE II.—DELHI-CALCUTTA.**

Ghaziabad, Sikandarabad, Aligarh, Etah, Manipuri, Tundla, Cawnpore, Lucknow, Unao, Fatehpur, Allahabad, Benares, Mogul Serai, Sasseram, Dehri, Barun, Aurungabad, Gaya, Burhi, Hazaribag, Ranchi, Gobindpur, Asansol, Ranugung, Khana Junction, Burdwan, Hooghly, Calcutta.

**ROUTE III.—AGRA-AJMERE.**

Agra, Bandikui, Jaipur, Ajmere.

**ROUTE IV.—GWAIIOR-JUBBULPORE-ALLAHABAD.**

Gwalior, Jhansi, Lalitpur, Saugor, Narsingpur, Chhindwara, Nagpur, Seoni, Chappara, Jubbulpore, Murwara, Rewah, Mirzapur, Allahabad.

**ROUTE V.—NAGPUR-HYDERABAD.**

Nagpur, Warora, Chanda, Wim, Secunderabad, Hyderabad.

**ROUTE VI.—CALCUTTA-PURI.**

Calcutta, Midnapore, Balasore, Bhadrak, Cuttack, Pipli, Puri.

**ROUTE VII.—CALCUTTA AND DARJEELING.**

Chinsurah, Barrackpore, Dum Dum, Port Canning, Diamond Harbour, Ranaghat, Kishnagar, Berhampore, Murshidabad, Parbatipur, Dinajpur, Siliguri, Darjeeling.



## GOVERNMENT TELEGRAPH OFFICES 87

### ROUTE VIII.—BOMBAY-BANGALORE.

Bombay, Thana, Karjat, Khandala, Lonaola, Kirkee, Poona, Mahableshwar, Panchgani, Wai, Satara, Karad Kolhapur, Nipani, Belgaum, Dharwar, Hubli, Ilaveri, Harihar, Davangeri. Shimoga, Tarikeri, Birur, Kadur, Arsikere, Tiptur, Gubbi, Tumkur, Chitaldrug, Hiriyyur, Sira, Bangalore

### ROUTE IX —POONA-MALEGAON.

Poona, Ahmadnagar, Aurungabad, Nandgaon, Malegaon.

### ROUTE X.—POONA-BIJAPUR.

Poona, Dhand, Sholapur, Pandharpur, Bijapur.

### ROUTE XI.—BIJAPUR-BELLARY-BANGALORE.

Bijapur, Bagalkot, Navalgund, Gadag, Hospet, Bellary, Anantapur, Kurnool, Cuddapah, Bangalore.

### ROUTE XII.—BELGAUM-SHIMOJA-MYSORE-MANGALORE.

Belgaum, Dharwar, Hubli, Yellapur, Karwar, Kinuta, Shimoja, Haribar, Firthahalli, Koppa, Sallebile, Balehonnur, Chikmagalur, Mudgere, Bantval, Mangalore, Hassan, Saklasapur, Belur, Mercara, Hunsur, Kunigal.

### ROUTE XIII.—MADRAS-BANGALORE-CALICUT-OOTACAMUND.

Madras, Vellore, Chittoor, Palmaner, Kolar, Ooregaum, Bangalore, Seringapatam, Mysore, Nanjaugud, Hunsur, Cannanore, Tellicherry, Calicut, Vayitri, Gudalur, Ootacamund, Coonoor, Mettupalaiyam.

### ROUTE XIV.—MADRAS-HYDERABAD.

Madras, Tiruvalur, Conjeevaram, Ponneri, Ongole, Hyderabad.

### ROUTE XV.—KURNOOL-CUDDAPAH.

Kurnool, Nandgal, Cuddapah.

### ROUTE XVI.—BANGALORE-COIMBATORE.

Bangalore, Hosur, Salem, Yercand, Bhavani, Erode, Satyamangalam, Coimbatore.

## ROUTE XVII.—MADRAS-TRICHINOPOLY-CALICUT.

St. Thomas Mount, Villupuram, Pondicherry, Cuddalore, Chidambaram, Porto Novo, Tanjore, Karuv, Kangayam, Palghat, Malappuram, Calicut.

## ROUTE XVIII.—TRICHINOPOLY-TRIVANDRUM-QUILON

Trichinopoly, Dindigul, Ammayanayakanur, Sholavandan, Madura, Nellakotta, Periyakulam, Kodai Kanal, Tirumangalam, Virudupati, Paramakudi, Sator, Koilpati, Palomcottah, Nanguneri, Nagercoil, Neyyattinkara, Srivilliputtur, Tinnevely, Shencottah, Tenkasi, Kundaia, Permade, Changanacherry, Quilon, Trivandrum

### Districts traversed with Chief Local Civil Authorities

## ROUTE I.—BOMBAY TO LUNDI-KOTAL AND SRINAGAR.

BOMBAY PRESIDENCY—*Districts*—Bombay, Thana, Nasik, West Khandesh (Dhulia). (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

NATIVE STATES—*Districts*.—Indore, Barwani, Dhar, Dewas, Gwalior, Narsingah, Rajgarh. (*Chief officials*: Agent to Governor-General (Indore), and local Durbar officials.)

UNITED PROVINCES—*Districts*—Agra, Aligarh. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

PUNJAB—*Districts*.—Delhi, Karnal, Umballa, Simla, Ludhiana, Ferozepore, Lahore, Gujranwalla, Gujrat, Jhelum, Rawalpindi. (*Chief officials*: Deputy-Commissioner and District Magistrate, Executive Engineer.)

N.W. FRONTIER AND CASHMERE STATE.—*District*.—Peshawar. (*Chief officials*: Deputy-Commissioner and District Magistrate, Executive Engineer.) For Khyber Pass (*Chief official*: Political Officer, Khyber) For Cashmere. (*Chief official*: Resident in Cashmere.)

## ROUTE II.—DELHI TO CALCUTTA.

PUNJAB—*District*.—Delhi. (*Chief officials*: Deputy Commissioner and District Magistrate, Executive Engineer.)

UNITED PROVINCES—*Districts*.—Aligarh, Etah, Manipuri, Farukhabad, Cawnpore, Unao, Lucknow, Fatehpur, Allahabad, Mirzapur, Benares. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

BENGAL—*Districts*.—Shahabad, Gaya, Hazaribag, Maubhum (Puralia), Burdwan, Hughli (Chinsurah), Howrah, 24 Perganas. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

#### ROUTE III.—AGRA TO AJMERE.

UNITED PROVINCES—*District*.—Agra. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

NATIVE STATES—*Districts*.—Bharatpur, Jaipur.

RAJPUTANA—*District*.—Ajmere.

#### ROUTE IV.—GWALIOR TO ALLAHABAD *via* SAUGOR, NAGPUR, AND JUBBULPORE.

NATIVE STATES—*Districts*.—Gwalior, Datia. (*Chief officials*: Agent to Governor-General, or local Durbar officials.)

UNITED PROVINCES—*District*.—Jhansi.

CENTRAL PROVINCES—*Districts*.—Saugor, Narsingpur, Chindwara, Nagpur, Seoni, Jubbulpore. (*Chief officials*: Deputy-Commissioner and District Magistrate, Executive Engineer.)

NATIVE STATES—*Districts*.—Mahar, Rewah.

UNITED PROVINCES—*Districts*.—Allahabad, Mirzapur. (*Chief officials*: Deputy Commissioner and District Magistrate, Executive Engineer.)

#### ROUTE V.—NAGPUR TO HYDERABAD.

CENTRAL PROVINCES—*Districts*.—Nagpur, Wardha (Warora), Yeotmal, Chanda. (*Chief officials*: Deputy-Commissioner and District Magistrate, Executive Engineer.)

NATIVE STATE (HYDERABAD)—*Districts*.—Sirpur Tandur, Indur, Medak, Hyderabad. (*Chief official*: First Talukdar of the District.)

#### ROUTE VI.—CALCUTTA TO PURI.

BENGAL—*Districts*.—Howrah, Midnapore, Balasore, Cuttack, Puri. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

#### ROUTE VII.—CALCUTTA TO DARJEELING.

BENGAL—*Districts*.—Calcutta, Nadia (Krishnagar), Murshidabad, Darjeeling. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

EASTERN BENGAL AND ASSAM—*Districts*.—Malda, Dinajpur. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

ROUTE VIII.—BOMBAY TO MAHABLESHWAR AND BANGALORE  
*via* POONA.

BOMBAY PRESIDENCY—*Districts*.—Thana, Poona, Satara, Belgaum, Dharwar. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

NATIVE STATES—*District*.—Kolhapur.

MYSORE — *Districts*.—Chitaldroog, Shunioga, Kadur (Chikmagalur), Bangalore. (*Chief officials*: Deputy-Commissioner and District Magistrate, Executive Engineer.)

ROUTE IX.—POONA TO MALEGAON *via* AURUNGBAD.

BOMBAY PRESIDENCY—*Districts*.—Poona, Ahmednagar, Nasik. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

NATIVE STATE (HYDERABAD)—*District*.—Aurangabad. (*Chief official*: First Talukdar.)

ROUTE X.—POONA TO BIJAPUR, BELLARY, AND BANGALORE.

BOMBAY PRESIDENCY—*Districts*.—Poona, Sholapur, Bijapur. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

NATIVE STATE—*District*.—Jath.

MADRAS PRESIDENCY—*Districts*.—Bellary, Anantapur.

MYSORE PROVINCE—*Districts*.—Kolar, Bangalore, Chitaldroog, Tumkur. (*Chief officials*: Deputy-Commissioner and Magistrate, Executive Engineer.)

ROUTE XI.—BELGAUM TO KARWAR.

BOMBAY PRESIDENCY—*Districts*.—Belgaum, Dharwar, North Canara (Karwar). (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

ROUTE XII.—SHIMOJA TO MANGALORE AND BANGALORE  
*via* CHIKMAGALUR.

MYSORE STATE—*Districts*.—Shimoja, Kadur (Chikmagalur), Hassan, Tumkur, Bangalore. (*Chief officials*: Deputy-Commissioner, Executive Engineer.)

MADRAS PRESIDENCY—*Districts*.—South Canara (Mangalore). (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

COORG—*District*.—Mercara. (*Chief official*: Commissioner.)

## DISTRICTS TRAVERSED

91

### ROUTE XIII.—MADRAS TO BANGALORE, CALICUT, AND OOTACAMUND.

MADRAS PRESIDENCY—*Districts*.—Chingleput (Madras), North Arcot, Malabar (Calicut), Nilghiri (Ootacamund). (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

MYSORE STATE—*Districts*.—Kolar, Bangalore, Mysore. (*Chief officials*: Deputy-Commissioner, Executive Engineer.)

### ROUTE XIV.—MADRAS TO HYDERABAD *via* ONGOLE.

MADRAS PRESIDENCY—*Districts*.—Chingleput, Nellore, Guntur. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

HYDERABAD STATE—*Districts*.—Nalgunda, Hyderabad. (*Chief official*: First Talukdar.)

### ROUTE XV.—KURNOOL TO CHITTOOR.

MADRAS PRESIDENCY—*Districts*.—Kurnool, Cuddapah, North Arcot. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

### ROUTE XVI.—BANGALORE TO COIMBATORE.

MYSORE STATE—*Districts*.—Bangalore, Mysore. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

MADRAS PRESIDENCY—*Districts*.—Salem, Corinbatore, Nilgiris. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

### ROUTE XVII.—MADRAS TO TRICHINOPOLY, TANJORE, AND CALICUT.

MADRAS PRESIDENCY—*Districts*.—Chingleput, South Arcot, Trichinopoly, Tanjore, Coimbatore, Malabar (Calicut). (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

### ROUTE XVIII.—TRICHINOPOLY TO TUTICORIN AND TRIVANDRUM.

MADRAS PRESIDENCY (TRAVANCORE STATE)—*Districts*.—Trichinopoly, Madura, Tinnevely. (*Chief officials*: District Magistrate and Collector, Executive Engineer.)

## BOMBAY TO THANA

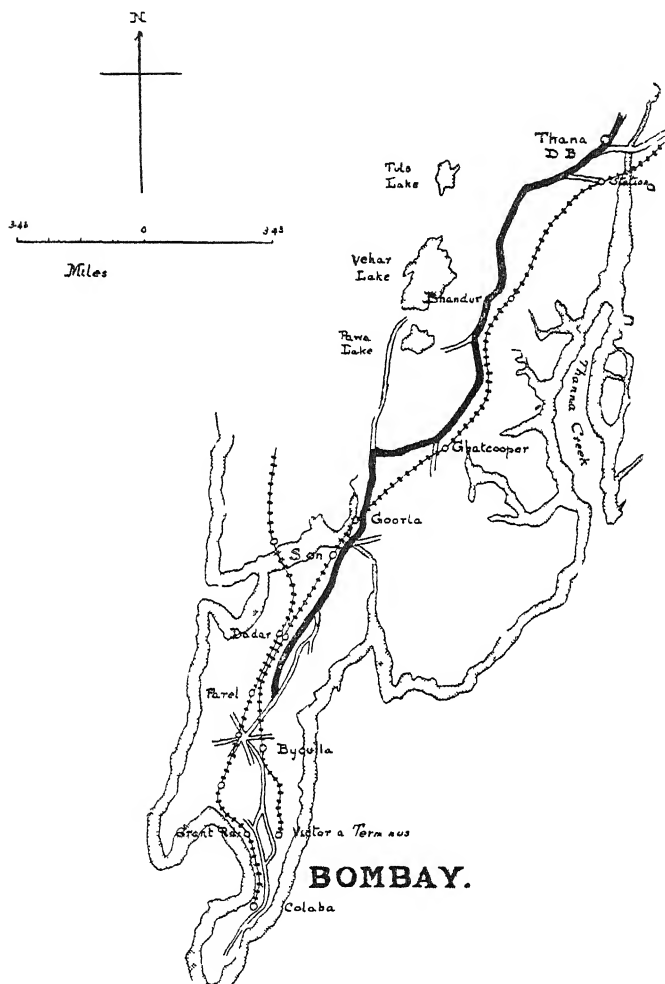
24 MILES

Level road Tram lines and heavy traffic for the first few miles

The best way out of Bombay is by way of Queen's Road, Mathew Road, Kennedy Bridge, Gamdevi Road, Grant Road Bridge, Gilder Street, Souter Street, Sankli Street, Byculla Bridge, Parel Road, Sopari Bag Road, and Vincent Road. The milestones from Bombay to Poona are on the right hand side of the road. Past the 9th milestone Lion Causeway is reached. There is a sharp bend to the right, and before reaching Coorla village the G. I. P. Railway level must be crossed. Past Coorla village after the 11th mile a sharp turn to the right conducts to Thana road and then a straight stretch of 11 miles leads into Thana.

## OBJECTS OF INTEREST

*Bombay* —The 'Gateway of India', situated on an island 11 miles long. Fine harbour and palm fringed bay along which there is a drive up to Malabar Hill, whence a good view can be had. The Parsee "Towers of Silence" are here also the residence of the Governor. The High Courts, University Tower, Post and Telegraph Offices, and the Victoria Terminus Railway Station, are imposing buildings. The native bazaars stretching from the Crawford Market to the Victoria Gardens at Byculla, are very interesting. Plague Laboratory, Parel. Elephanta Caves, on an island across the harbour (steam launch or boat), date from the eighth century.



## THANA TO IGATPURI .. .. 58 MILES.

*Thana to Bhirwandi (9 Miles)*

The ferry across the creek is tiresome, and must be taken at high tide.

There is also a ferry at Kalyan, but the former is recommended

*Bhirwandi to Shahapur (17 Miles)*

Fair, level road, but intersected by about thirty "Irish bridges"—stone channels for water—which must be taken carefully, or broken axles or springs will result. Many of them are impossible to see until one is almost on them

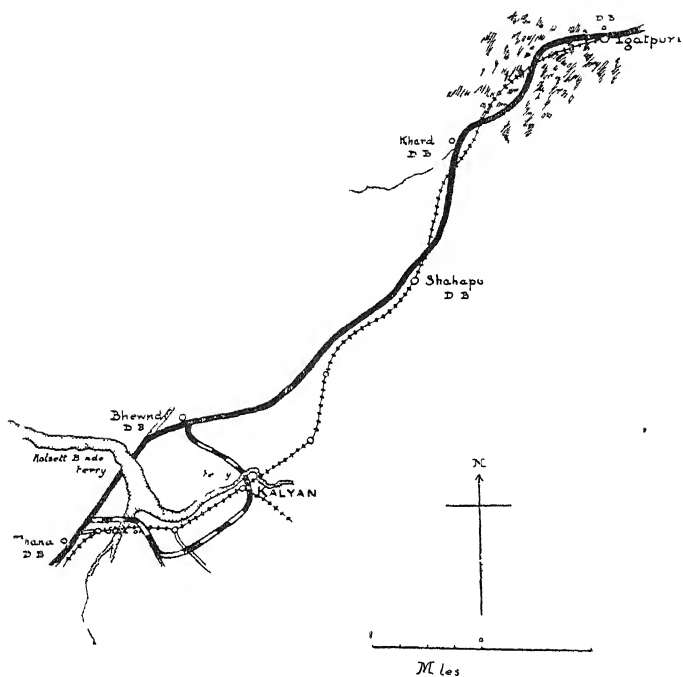
*Shahapur to Igatpur (32 Miles)*

Good road. Igatpur, a summer resort, is 2,000 feet above sea level, and the way up the Ghats is steep, but the scenery is beautiful.

## OBJECTS OF INTEREST

*Thana.*—Cave Temples of Kankari, 6 miles from Dâk bungalow, very numerous. Vehar Lake near Bhandup, and Tulsi Lake, 2 miles to the north, supply fresh water to Bombay City.





## IGATPURI TO DHULIA . . 80 MILES (OF ROAD).

*Igatpur to Nassick (25 Miles)*

Good, level road.

*Nassick to Munmar Station*

It is advisable to take the train from Nassick to Munmar, as there is no ferry across the Kadwa River.

Train Nassick, 8 a. m. ; Munmar, 11.15 a. m.

Notice must be given to the station master at Bombay or Igatpur twenty-four hours before the truck is wanted at Nassick.

There is an excellent restaurant at Munmar Station

*Munmar to Malegaon (20 Miles)*

Good, level road.

*Malegaon to Dhulia (36 Miles)*

Good road. Some "Irish bridges."

## OBJECTS OF INTEREST.

*Nassick*.—A sacred city of the Hindus. The bank of the river Godavery, or Ganga, is thickly lined with temples, the principal of which, in the suburb of Panchwati, is dedicated to Rama. The Buddhist caves of Pandu Lena, dating from the first century B C to the second century A D, lie 5 miles to the south-west.

Trimbak, 20 miles off, is venerated as the sacred source of the river Godavery, and every twelfth year is visited by tens of thousands of pilgrims. The road is passable, and the journey there and back can be made in one day.

Nassick is the headquarters of the Royal Western India Golf Club. Good links

*Saptashring*—Shrine on a mountain 4,659 feet high, 28 miles north of Nassick. Good road. Built stone steps to the summit.

*Malegaon*—An abandoned cantonment. Is well laid out in roads. Old fort captured by British after a siege.

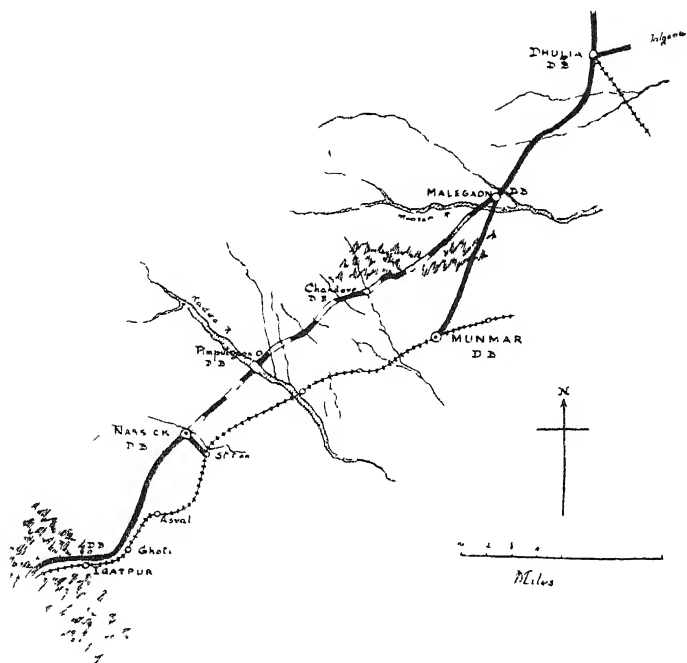
## ERRATA.

### PAGE 96.

There is now a good wide bridge over the KADWA RIVER with long approaches from the left of the old road, and the 65 miles of road between NASIK and MALEGAON is in excellent condition. The CHANDORE GHAT is of moderate gradient with two hairpin corners.

The total distance between IGATPURI and DHULIA is 126 miles.

*(Correction inserted by Thacker, Spink & Co., Calcutta.)*



## DHULIA TO KHAL GHAT . 110 MILES

*Dhulia to the Tapti River (30 Miles)*

Khandesh district

Fair road The crossing of the Tapti River is tiresome, there being several hundred yards of loose and deep sand on both banks, over which the car must be pulled by bullocks

There are plenty of natives and bullocks to be hired

*The Tapti River to Khal Ghat (80 Miles)*

Route through the Satpura Hills inhabited by aboriginal Bhil tribes

Government roads end 5 miles south of Sendwa after which through Holkar's territory, the surface is very bad with many steep and bad stone causeways, which require careful driving

Unless there is plenty of time and light, a stop had better be made at Khal Ghat Dak Bungalow, as the crossing of the Nerbudda River takes a considerable time There are plenty of natives to assist in crossing the ferry

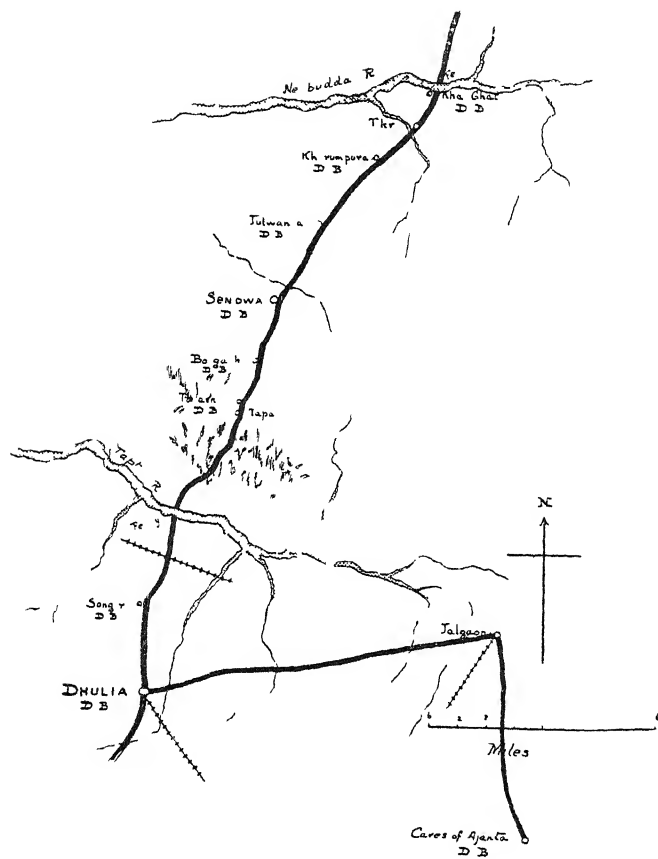
In the cold weather there is an indifferent stone causeway across the river, but the island near the centre of the causeway is very sandy and the going heavy

*Dhulia to the Caves of Ajanta (about 80 Miles)*

Very fair road There is a rest house at Fardapur, 30 miles from Jalgaon, it is the nearest one to the Caves

## OBJECTS OF INTEREST

*Ajanta Caves* —These Buddhist caves are twenty nine in number, and are among the best specimens of cave architecture in India The celebrated fresco paintings, supposed to be 1,400 years old, admirably illustrate the religious and social life of the people of India at that epoch



## KHAL GHÁT TO MAKSI ... .. 96 MILES.

*Khal Ghát to Mhow (37 Miles):*

Bad road, with steep causeways.

*Mhow to Indore (12 Miles):*

Good, level road.

*Indore to Maksi (47 Miles):*

Good road.

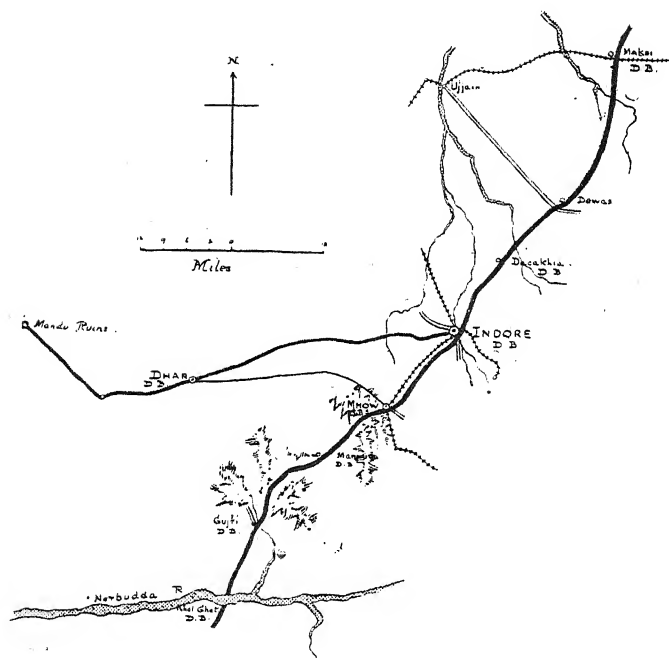
*Indore to Mandu Ruins (about 63 Miles):*

Good road. No food is obtainable here, and if the motorist is driven to stay overnight he had better sleep in the gateway of the Jama Masjid. From Mhow the distance is about 50 miles.

## OBJECTS OF INTEREST.

*Mandu Ruins.*—The imposing and lofty Mohammedan stronghold in Central India between A.D. 1400 and A.D. 1700. Very striking and massive ruins of palaces and courts, with crumbling mosques and tombs on the borders of tanks. The walls are about 38 miles in circumference. Lovely views can be obtained of the plains below. The Jama Masjid is said to be the best specimen of Afghan architecture extant in India.

*Indore.*—Capital of Native State. Maharajah Holkar's Palace is in the city.





MAKSI TO GOONA

128 MILES

*Maksi to Sarangpur (26 Miles)*

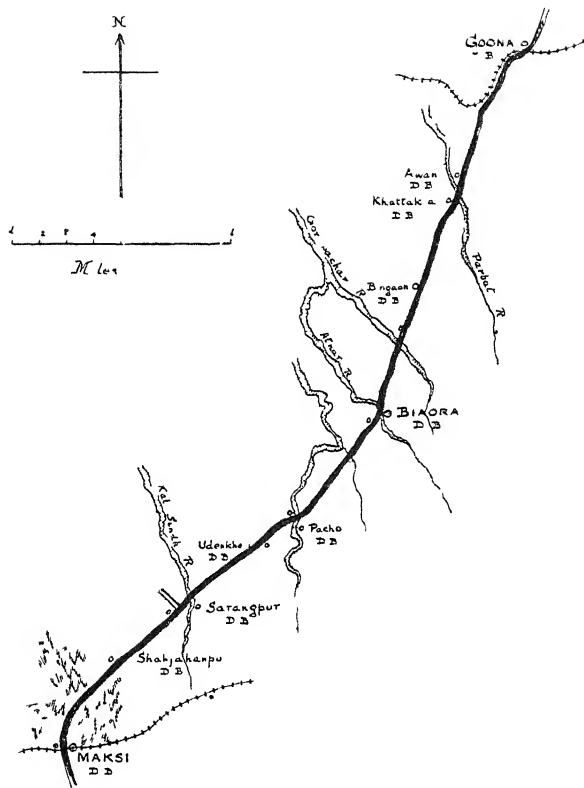
Fair road There is a long stone causeway across the Kali Sindh River, which has a foot of water over it after rain

*Sarangpur to Braora (41 Miles)*

Very fair road

*Braora to Goona (61 Miles)*

Very fair road



## GOONA TO GWALIOR

130 Miles

*Goona to Sirri (60 Miles)*

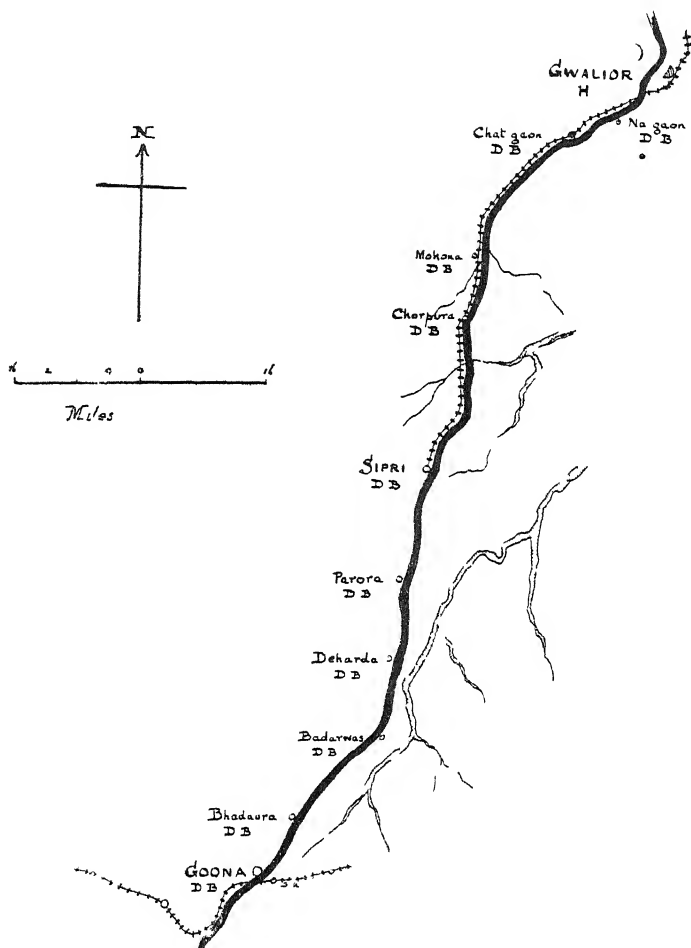
Fair road

*Sirri to Gwalior (70 Miles)*

Good road

## OBJECTS OF INTEREST

*Gwalior*.—Permission to see the Maharajah's Palace may be obtained from his military secretary. The Fortress—one of the most ancient and renowned strongholds in India—is 3 miles in circumference, and has an interesting Jain temple and other buildings. It also contains unique rock sculptures. Stormed by the British in the Mutiny, when the rebels under Tantia Topi and the Rani of Jhansi were defeated. Visitors are now merely required to sign their names in a book at the entrance to the Fort.



GWALIOR TO AGRA ... 73 MILES.

*Gwalior to Dophur (37 Miles)*

Good road. The ferry across the Chambal River is awkward. In the cold weather there is an indifferent boat bridge.

*Dophur to Agra (36 Miles)*

Very good road.

*Agra to Fatehpur Sikri (22 Miles)*

Good road. The ruins are exceptionally interesting, and in good preservation.

OBJECTS OF INTEREST.

*Agra.*—The famous Taj Mahal Mausoleum, built entirely of white marble, the central dome being nearly 200 feet high. The view of the Tomb and garden from the top of the gateway at the entrance is magnificent. The walls are inlaid with rare coloured stones in exquisite ornamental and floral designs. The Fort, with Akbar's (? Jahangir's) Palace and the Pearl Mosque. The native city. The beautiful ruined city of Fatehpur Sikri, 22 miles from Agra, along an excellent road. Built and then deserted by Akbar. Sikandra, containing the Mausoleum of the Emperor Akbar, 5 miles distant.



AGRA TO DELHI ... 133 MILES.

*Agra to Aligarh (55 Miles)*

Very good road

*Aligarh to Delhi (76 Miles)*

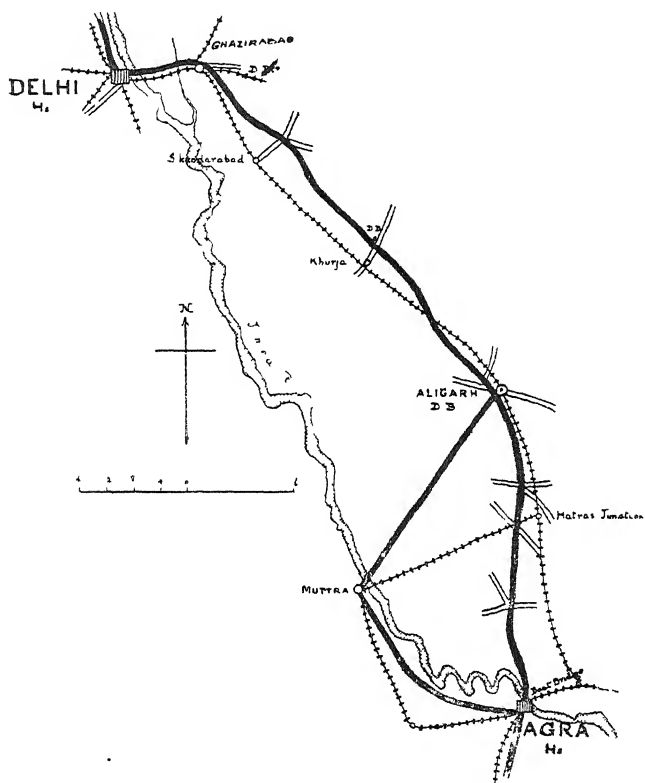
Very good road

Splendid bungalow at Aligarh

OBJECTS OF INTEREST.

*Delhi.*—The sights outside the city in connection with the Mutiny and the Siege Flagstaff Tower, the Ridge, Metcalfe House, Ludlow Castle, Kashmir and Delhi Gates, Mutiny Monument, and Nicholson's Statue. The Fort and Palace, with its splendid halls The Great Jama Masjid Mosque. The famous Kutab-Minar monument and the Jain Mosque. The Chandni Chauk, the great native business street. Magnificent ruins for miles around the city, including Tomb of Emperor Humayun.

*Aligarh.*—Very ancient town, with old fort, originally built in 1524, and reconstructed by the French in the eighteenth century. Fine mosque in the adjacent town of Koil Anglo-Oriental College for the education of upper-class Moslems.





DELHI TO UMBALLA .. .. 120 MILES.

*Delhi to Panipat (54 Miles)*

Level road ; surface fair.

*Panipat to Kurnal (19 Miles)*

Level road ; surface bad.

*Kurnal to Umballa (47 Mile )*

Level road , surface bad.

The Bahi and Tangri, just south of Umballa, are two very bad, dry torrents, with very deep sand. The Bahi is practicable, but the car must be pulled across the Tangri by natives.

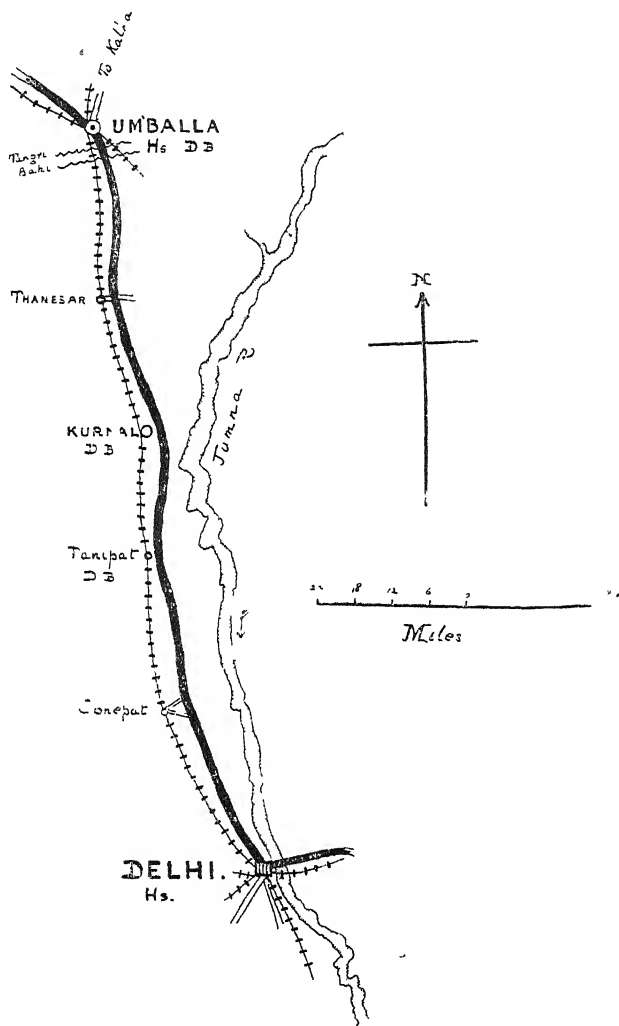
OBJECTS OF INTEREST.

*Panipat.*—Scene of three of the most decisive battles in Indian history : Moghuls defeated the Indians under the King of Delhi, 1526 ; Akbar routed the Pathans 1556 ; Afghans crushed the Mahrattas, 1761.

*Kurnal.*—Scene of battle between Nadir Shah and the Moghul Emperor Mahomed Shah in 1739. The Persian conqueror afterwards sacked Delhi, carrying off the famous Peacock Throne, the Koh-i-noor diamond, and treasure valued at 70 millions sterling.

*Thanesar.*—Famous place of pilgrimage. Marble Tomb and sandstone Mosque of beautiful workmanship.

*Umballa.*—Military cantonment , branch road to Kalka and Simla.



( III )

### UMBALLA TO SIMLA, VIA KALKA, 99 MILES

The road from Umballa to Kalka skirts the railway, and is throughout level and easy going. At Kalka motorists must take the tonga road, the total distance being made up as follows:

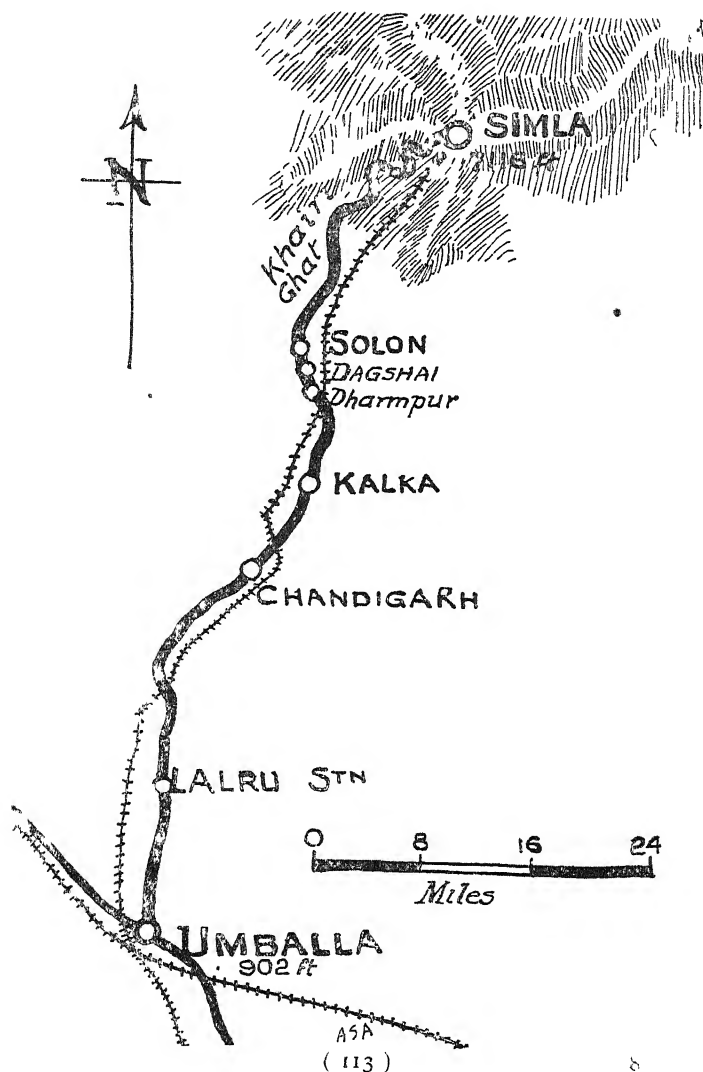
Kalka to Dharmpur	15 $\frac{1}{2}$ miles
Dharmpur to Solon	12 $\frac{1}{2}$ "
Solon to Khairi Ghat	13 $\frac{1}{2}$ "
Khairi Ghat to Simla	18 $\frac{1}{2}$ "
	<hr/>
	60 "

The road is a good one throughout, with a steady rise. Some what narrow as far as Dharmpur, it then broadens out, passes the hill cantonment of Dagshai, climbs 6 miles to the head of the Barogh ridge, and thence drops to Solon, where good food and accommodation are obtainable. There is then a level stretch, but at Chandigarh the ascent begins again to Khairi Ghat, whence there is another even run to the foot of the final ascent into Simla. This is 6 miles long, mostly through forest. Cars are allowed to be brought up to the very outskirts of Simla, but not into the town itself.

#### OBJECTS OF INTEREST

*Simla* — Summer hill-station of the Government of India. Picturesque and Europeanized, pretty surroundings.

*Kasauli* — The famous convalescent depot and Pasteur Institute can be reached by road (easy gradients) from Dharmpur (7 miles).



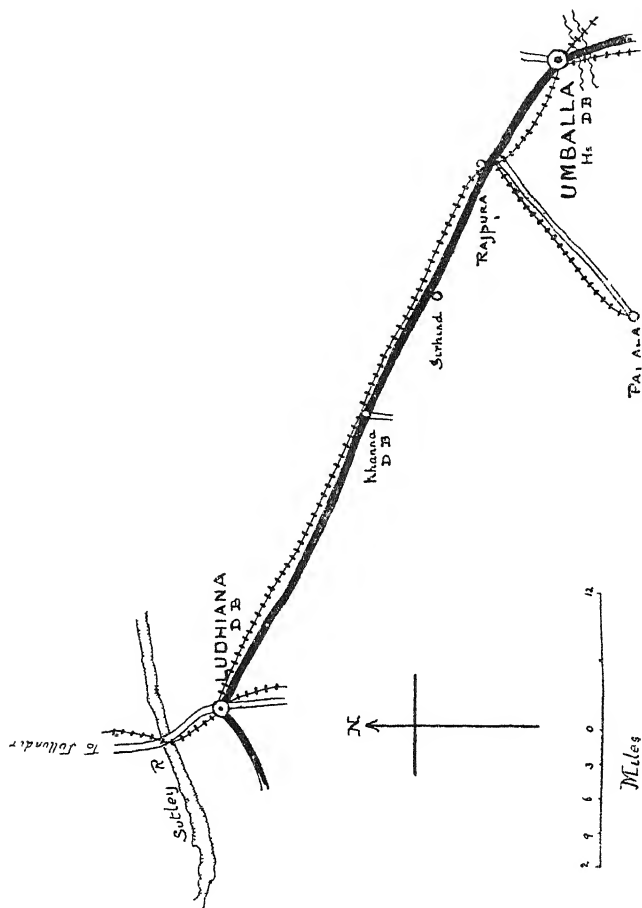
UMBALLA TO LUDHIANA      79 MILES

From Umballa to Khanna the surface is bad  
 From Khanna to Ludhiana there is a good level road.  
 Excellent dak bungalow at Ludhiana

OBJECTS OF INTEREST

Near Ludhiana was fought the Battle of Aliwal (1846), in the first Sikh War. The Sikhs were defeated.

Sirhind is a town of very great antiquity, and was one of the most flourishing cities of the Moghul Empire. Destroyed by the Sikhs (1763). Fine old tombs, notably that of Mir Miran.



## LUDHIANA TO LAHORE ... .. 126 MILES.

*Ludhiana to Dargu (42 Miles).**Dargu to Ferozpur (34 Miles).**Ferozpur to Lahore (50 Miles).*

Splendid road all the way. No obstacles of any kind.

There is an alternative route from Ludhiana to Lahore by Jullundur and Amritsar. The road is good throughout, but the Beas River has to be crossed 23 miles north of Jullundur, and the car must be entrained for the purpose.

*Lahore to Amritsar (35 Miles):*

Level, straight road ; surface poor.

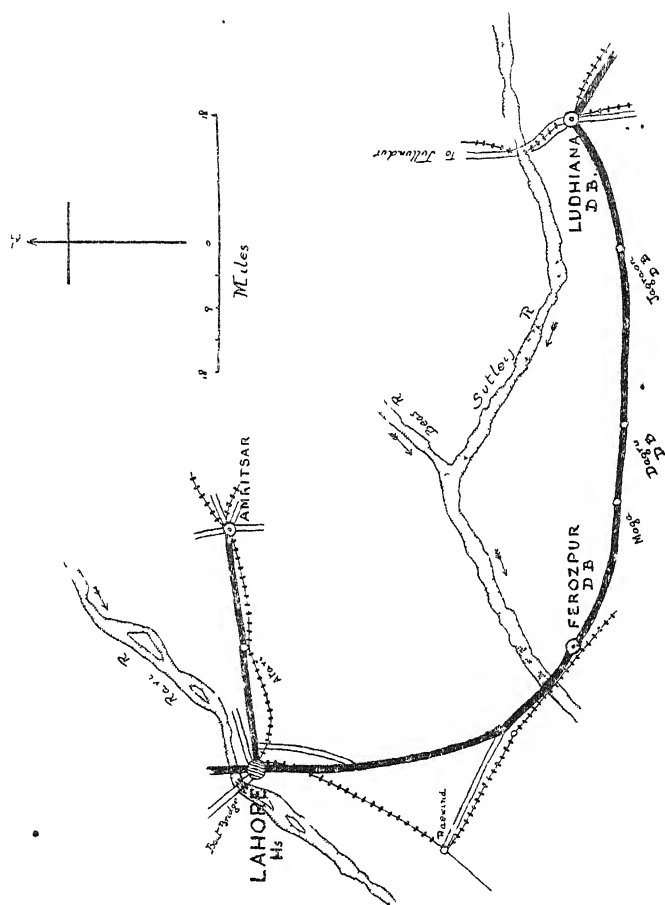
## OBJECTS OF INTEREST.

*Ferozpur.*—Near here were fought three great battles of the first Sikh War—Moodki (1845), Ferozeshah (1845), Sobraon (1846), all British victories, after hard struggles.

*Amritsar.*—Celebrated for the excellence of its manufacture of Cashmere goods, and for the great Sikh temple, known as the Golden Temple, situated in the middle of a splendid tank, called the Pool of Immortality. A fine causeway of white marble leads to the temple, and a marble roadway borders the lake. It is one of the finest and most interesting temples in India.

The fortress of Govind Singh is 3 miles distant.

*Lahore.*—A walled town, and chief city of the Punjab. Within the fort is the cenotaph of Ranjit Singh ; the Great Badshahi Mosque, believed to have been built by Aurungzeb , and Wazir Khan's Mosque. Across the Ravi is the Shah Dara, or Mausoleum of the Emperor Jehangir. The native town is worth seeing. The Shalimar Gardens, laid out in 1637 by Shah Jehan. Tomb of Anar Kali.





LAHORE TO JHELUM .. .. 102 MILES

*Lahore to Wazirabad (62 Miles)*

Good level road.

*Wazirabad to Kathala (4 Miles)*

The car must be entrained, as there is no other way of crossing the Chenab River

Trains. Wazirabad, 11 32, Kathala, 11.54, Kathala, 13.10, Wazirabad, 13 32 The times are sometimes nominal.

The car must be at the station a good hour before the train is timed to start.

*Kathala to Jhelum (36 Miles)*

Good level road ; surface bad in parts.

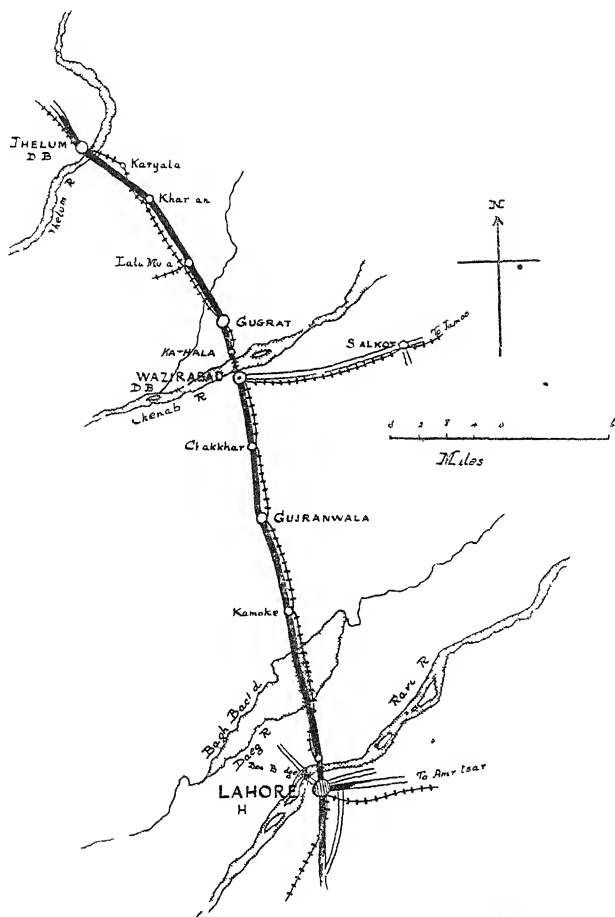
OBJECTS OF INTEREST

*Guyrat*.—Scene of the decisive and concluding battle of the second Sikh War (1849) Near by is Chillianwalla (1849), the scene of the most desperate (drawn) battle ever fought between the Sikhs and British.

Alexander is supposed to have defeated Porus near Chillianwalla, 327 B.C.

*Jammu*.—Winter capital of Maharajah of Jammu and Cashmere, 25 miles from Sialkot.

*Rohtas*.—Eleven miles from Jhelum. Famous fort and ruins of palace



## JHELUM TO PESHAWAR ... .. 171 MILES.

*Jhelum to Rawal Pindi (68 Miles) :*

Excellent road, through winding hills.

*Rawal Pindi to Attock (55 Miles) :*

Good road. Road and rail bridge across Indus River.

*Attock to Peshawar (48 Miles) :*

Fair level road till 12 miles from Peshawar, when there are bad dips in the road, which require careful driving, especially after rain.

From Peshawar it is a pleasant run to the north-east, via Mardan, the road being good, and metalled to Dargai. Thence there is a stiff climb to the Malakand (66 miles). with a subsequent drop to the Swat River. Mardan can also be reached from Nowshera (15½ miles).

## TABLE OF MILEAGE.

	<i>Miles.</i>		<i>Miles.</i>
Peshawar—		Jalala ...	44
Nisatha ...	16½	Dargai ...	57
Mardan ...	32½	Malakand ...	66

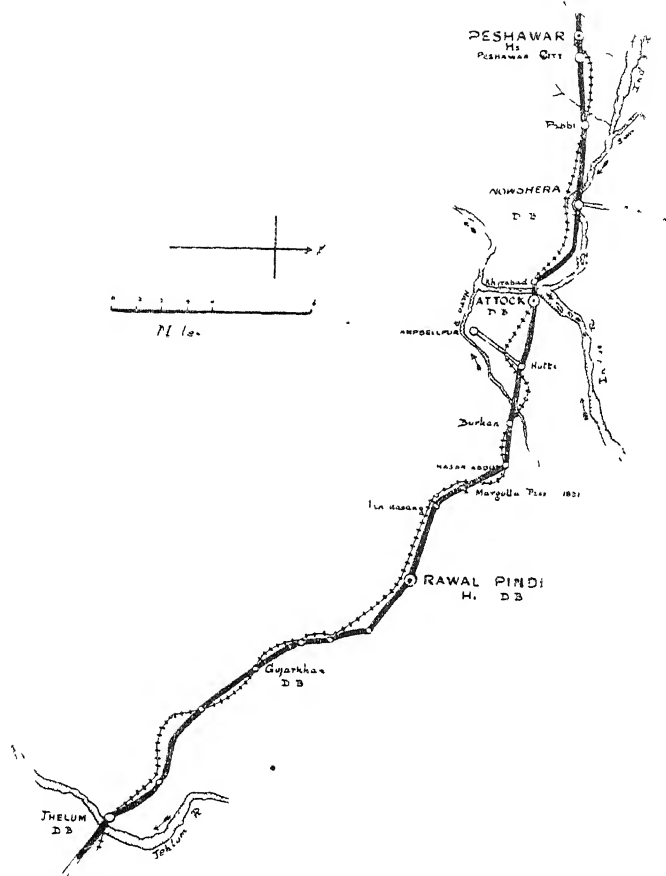
## OBJECTS OF INTEREST.

*Peshawar.*—The ancient capital of the Gandhara province. It has at all times been historically important. The native city is surrounded by a mud wall 10 feet high, chiefly as a protection from robbers. The large building known as Ghor Khatri was once a Buddhist monastery, and was afterwards rebuilt into a Hindu temple. The Bala Hissar crowns a small hill outside the city wall, and completely dominates the city. Its walls rise to a height of 92 feet above the ground, with a *fausse braye* of 30 feet. Visitors to the Khyber Pass can only go on Fridays and Tuesdays, unless a special permit is obtained from the Political Officer of the Khyber.

*Rawal Pindi.*—Very large military cantonment. Starting-place for Murree (37 miles away), the magnificent northern sanatorium of the Punjab.

*Attock.*—Commanding fort, built by Akbar, and a very fine railway bridge over the Indus.

*Hassan Abdal.*—Tomb of Lalla Rookh and spring of Baba Wali.



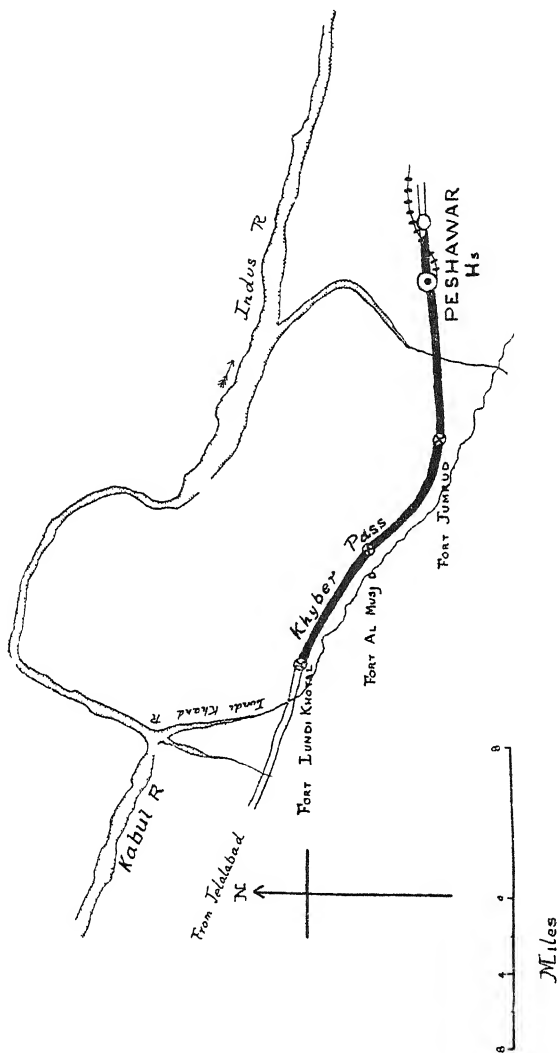
## PESHAWAR TO LUNDI KHOTAL 31 MILES

Fair metalled road to Jumrud Fort, after that mostly unmetalled but surface fairly good.

For the first mile up the Khyber Pass the gradient is 1 in 17, and then 1 in 12 for about 200 yards, with bad hair pin bends which require careful driving

For the rest of the way the road is rough and hilly, but quite practicable

Permission to go up the Khyber Pass must be obtained from the Political Officer of the Khyber, Peshawar. The pass is guarded by the Corps of Khyber Rifles, consisting of Afridis enlisted for the purpose, and is only open on certain days of the week for caravan traffic. The famous fort of Ali Musjid is visible from the Shagai ridge



RAWAL PINDI TO SRINAGAR 200 MILES

*Rawal Pindi to Mirree (38 Miles)*

*Mirree to Kohala (26 Miles)*

Jhelum crossed by a bridge

*Kohala to Dumel (22 Miles)*

Dumel is 2,500 feet above sea level

*Dumel to Gurh (13 Miles)*

Road usually good throughout

*Gurh to Hutt (11 Miles)*

Good road Hutt is about 3,000 feet above sea level Scenery very fine

*Hutt to Chagot (14 Miles)*

Steep ascent in the road, leaving the Jhelum hundreds of feet below

*Chagot to Uri (13½ Miles)*

Good road Scenery very fine Very steep precipices down to the Jhelum

*Uri to Baramula (28½ Miles)*

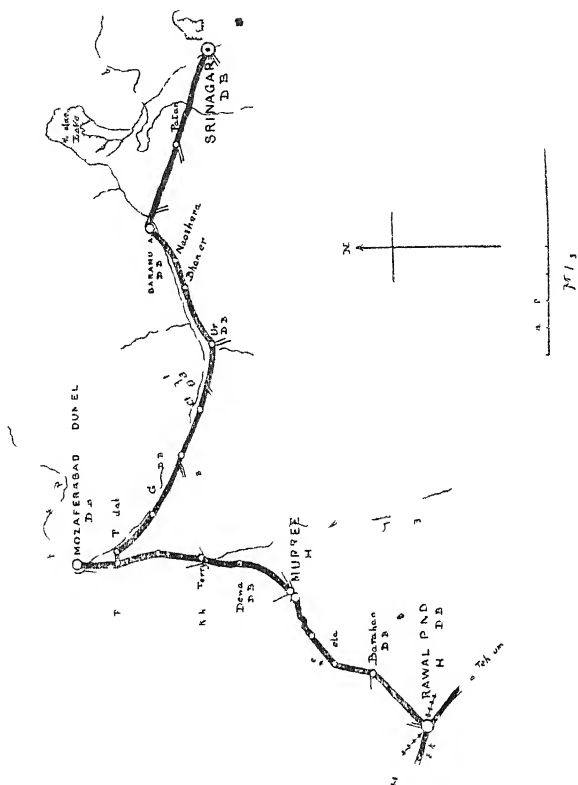
Good road.

*Baramula to Srinagar (34 Miles)*

Good cart road.

OBJECTS OF INTEREST

*Srinagar* —The capital of Cashmere, a most quaint and picturesque city, beautifully situated in the centre of the "Happy Valley" Charming surroundings Famous floating gardens Gulmarg, the summer resort, is 25 miles distant, and 8,500 feet in height. The snowy range is clearly seen.





DELHI TO CAWNPORE

266 MILES

*Delhi to Aligarh (82 Miles)*

Good level road

*Aligarh to Etah (44 Miles)*

Level, winding road, surface fair

*Etah to Bhongaon (40 Miles)*

Level, winding road

*Bhongaon to Cawnpore (100 Miles)*

Good level road.

AGRA TO BHONGAON ...

65 MILES

*Agra to Tundla (16 Miles)*

Good level road

*Tundla to Shikohabad (14 Miles)*

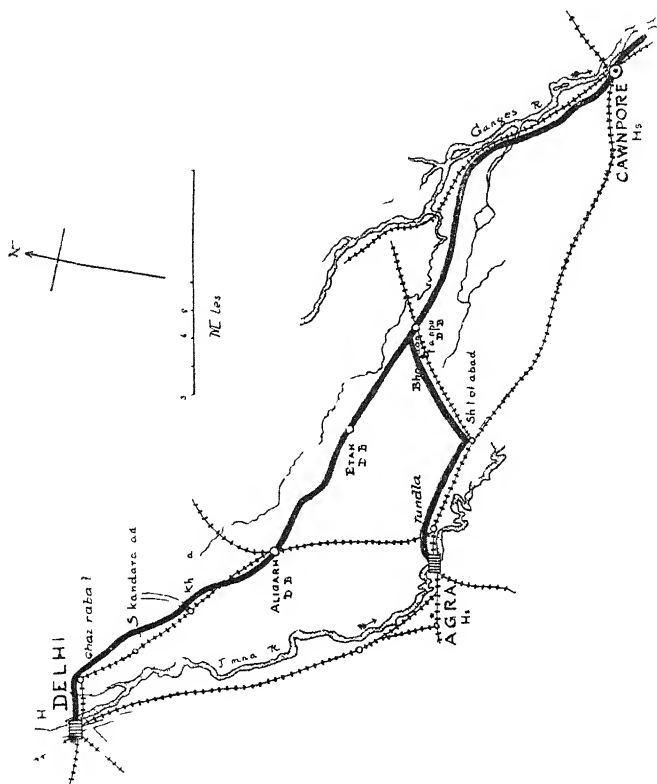
Good level road Be careful to take left hand road at Shikohabad, the right hand road through Etawah being quite impracticable

*Shikohabad to Bhongaon (35 Miles)*

Good level, winding road At the cross road near Bhongaon turn sharp to the right into the Grand Trunk Road from Delhi to Cawnpore.

OBJECTS OF INTEREST

*Cawnpore*—City of melancholy fame imperishably connected with the Mutiny of 1857 The objects of interest are the Memorial Garden, with the Memorial Statue and Marble Screen, erected over the well into which the victims of the massacre were cast, Wheeler's Entrenchment; the Sati Chowra Ghat (Massacre Ghat) where the garrison were done to death; and the Memorial Church, with a small cemetery situated near the European Infantry Barracks A manufacturing city



## CAWNPORE TO LUCKNOW ... 50 MILES.

For the first 15 miles the surface is bad, with heavy traffic, after that, excellent.

There is no practicable road from Lucknow to Allahabad, and it is necessary to rejoin the Grand Trunk Road at Cawnpore.

## CAWNPORE TO ALLAHABAD .. 124 MILES.

Good level road ; surface fair.

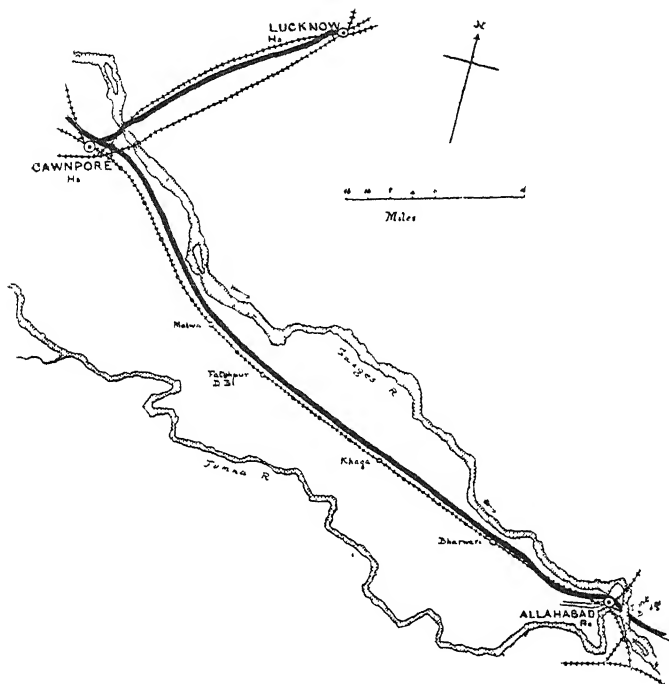
## OBJECTS OF INTEREST.

*Allahabad.*—This city, the ancient Prayag, which was built by the Hindus, and is held sacred by them, is about 3 miles from the confluence of the Ganges and Jumna, of which a most interesting view is obtained from the fort. The fort was built by Akbar, and named by him "Allahabad," the "City of God."

Permission to see the arsenal must be obtained from the Commissary of Ordnance.

The native quarter is quite distinct from the European part of the city, which is called Canning Town, and has been built since the Mutiny. Kushru Bagh. Asoka's Pillar.

*Lucknow.*—The principal city in Oudh. The Mutiny siege buildings. The Secundra Bagh, scene of the desperate fighting between the 93rd, 53rd, and 4th Punjab Infantry of Sir Colin Campbell's relief force and the mutineers. The famous shot-battered Residency, the Alum Bagh, the Dilkusha, La Martinère College, the Shah Nujeeb, the great Imambarrah, the Hosainabad Palace, the Kaiser Bagh.



## ALLAHABAD TO BENARES ... 76 MILES.

At Allahabad take the road across the Bridge of Boats to the left bank of the Ganges River. The road on the right bank is not practicable.

The approach to the Boat Bridge, and for  $1\frac{1}{2}$  miles the other side (5 miles altogether), is very bad, with loose sand on planks, and requires very careful driving. From there the road is excellent.

Into Benares City the road is very narrow and winding, with a great native population and heavy traffic.\*

## OBJECTS OF INTEREST.

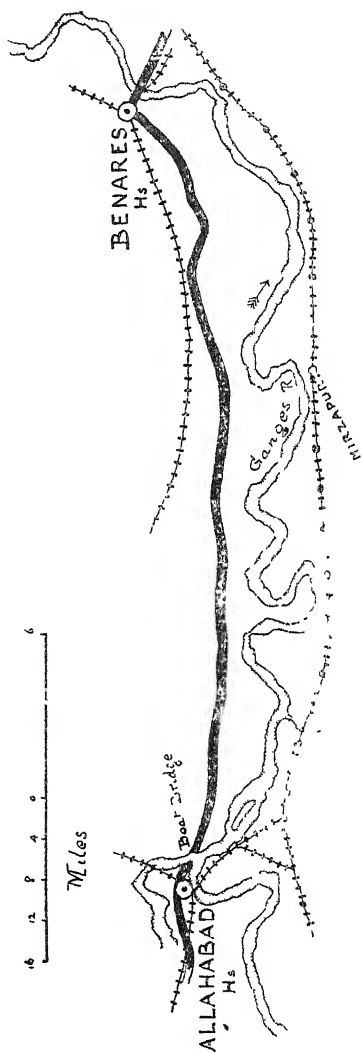
*Benares.*—The sacred city of the Hindus. The temples and shrines number over 5,000, of which the Golden Temple, Monkey Temple, and the Mosque of Auungzeb are among the most important. To see the Burning Ghât, a boat is placed at the disposal of visitors, free of charge, by Moti Chaud, Rais of Azmat-gah. Visitors who wish to use the boat must communicate with Moti Chaud one week beforehand if from a distance, and forty eight hours beforehand if from Benares. Or a boat can easily be hired for a few rupees.

The Buddhist remains at Sarnath, 4 miles from the city, are well worth a visit.

\* For detailed list of villages on the route see Appendix E.



Miles  
0 4 8 12 16



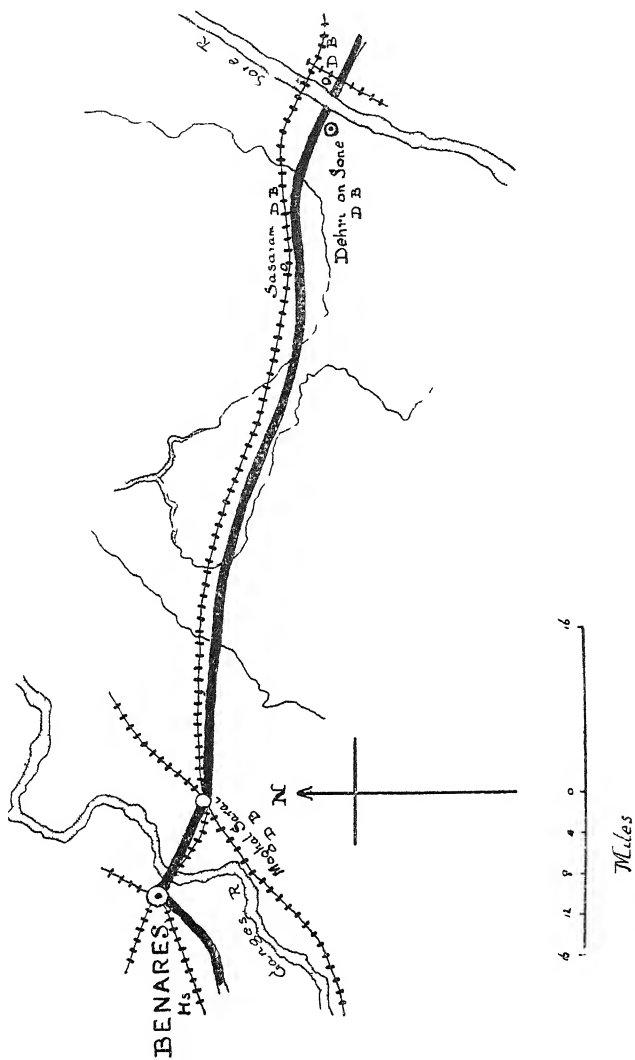
( 131 )

BENARES TO DEHRI-ON-SONE    ..    80 MILES.

Level, straight road ; surface poor.

It is necessary to stop the night at the dâk bungalow at Dehri on-Sone, and to arrange for the crossing of the Sone the next morning. The Sone is 3 miles wide, and the crossing takes about three hours, the landing on the east bank being very difficult.\*

\* For detailed list of villages on the route see Appendix E.





## DEHRI-ON-SONE TO GYA ... .. 70 MILES.

Level, straight road ; surface poor.

For Gya, leave the Grand Trunk Road at the 279th milestone from Calcutta, taking the road on the left.

Four miles from Gya take the left-hand road into the town, the right being very bad.

From the 279th milestone to Gya is about 20 miles

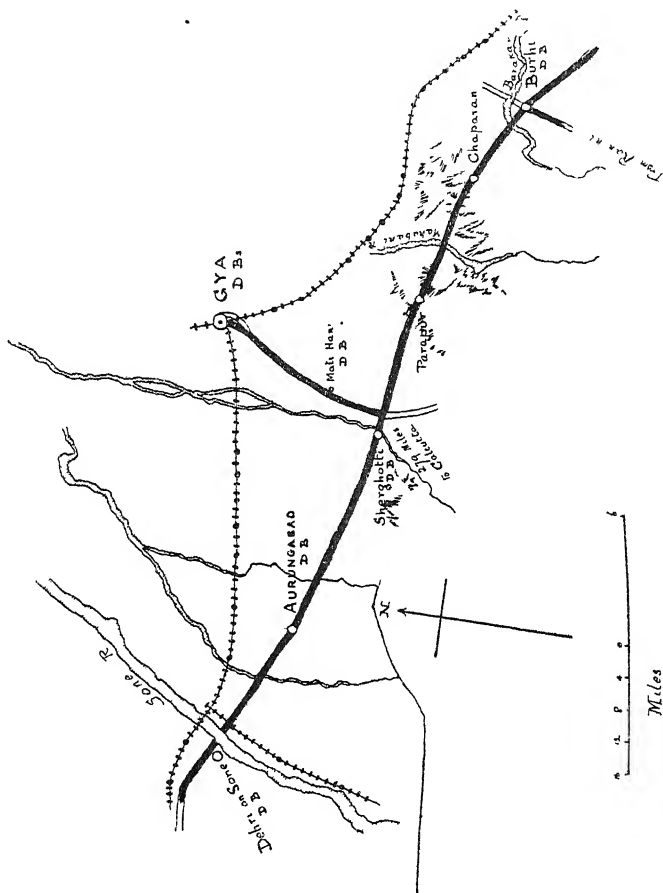
## GYA TO BURHI ... .. 60 MILES.

Winding, switchback road ; surface bad.

There is a bad causeway 30 miles from Gya, about the 269th milestone from Calcutta

## OBJECTS OF INTEREST.

Gya. Temple of Buddh Gya 7 miles south. Of great antiquity (543 B.C.). Carved pillars and inscriptions.



BURHI TO ASANSOL

120 MILES

Level, straight road ; surface bad until Katrasgaih, thence good

BURHI TO RANCHI

79 MILES

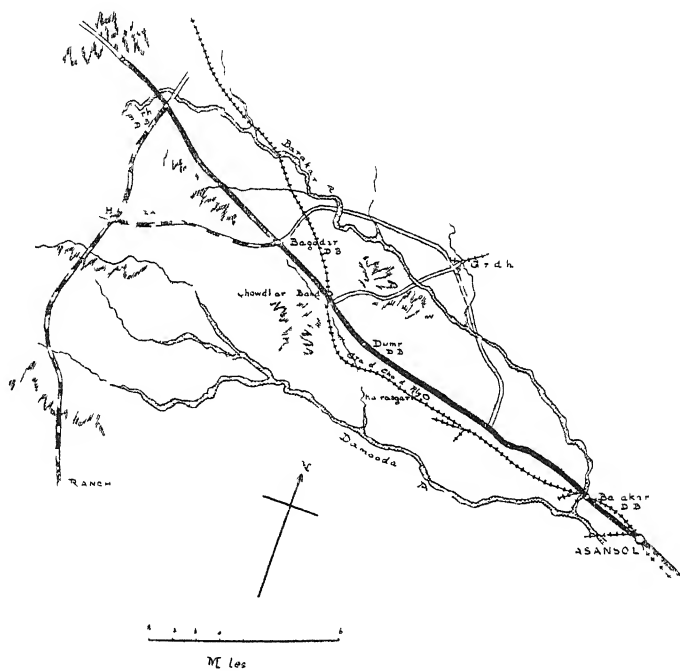
*Burhi to Hazaribagh (21 Miles)*

*Hazaribagh to Ranchi (58 Miles)*

*Hazaribagh to Bagodar (32 Miles)*

This may be taken as an excursion from Burhi or from Bagodar. The roads are very fair, and the country, composed of tiger jungle, is very pretty.

The rise from Bagodar to Hazaribagh is about 1,200 feet.



# ASANSOL TO CALCUTTA

132 MILES

*Asansol to Burdwan (66 Miles )*

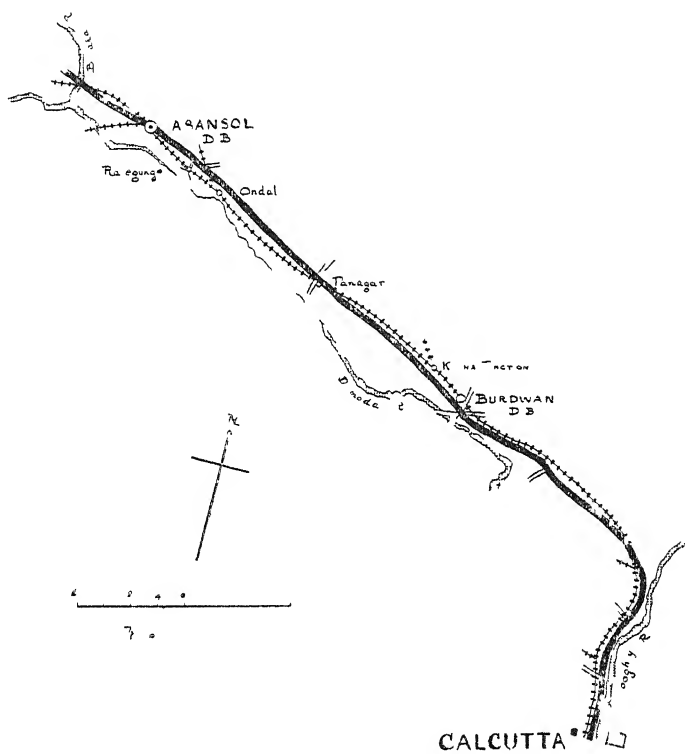
*Burdwan to Calcutta (66 Miles )*

For the first 20 miles the road is hilly and the surface fur, after that it is an excellent straight road

On nearing Calcutta the traffic is very heavy, and numerous villages make careful driving necessary

## OBJECTS OF INTEREST

*Calcutta*—The capital of India, and the second largest city in the British Empire The Hooghly The Maidan Fort William The "Black Hole" site Very fine Botanical Gardens Town Hall Government House Museum Race Course During the cold season Calcutta is as gay as any European capital, and is full of visitors



## AGRA TO JAIPUR ... . ABOUT 150 MILES.

Parts of the road are fair, but as a whole it is not good for motoring, and some very careful driving is necessary. The time of the year must be carefully chosen, as during the rains many of the unbridged rivers are impassable. There are two roads from Agra to Bharatpur; the one leads through the ruined city of Fatehpur Sikri—as far as which place it is excellent and well shaded by trees—and then bends north, but deteriorates (35 miles); the other, which is metalled throughout, goes direct (32 miles). The road, now poor, then passes through Luharu (11 miles) and Halena (11 miles) to Ulupura (11 miles)—in all 33 miles. Thereafter the chief difficulty lies in the crossing of the Banganga, which is effected two miles away. The river is usually dry, save in the rains, when recourse must be had to a ferry-boat. On the opposite side of the river there is a good metalled road to Mahwa and Jaipur.

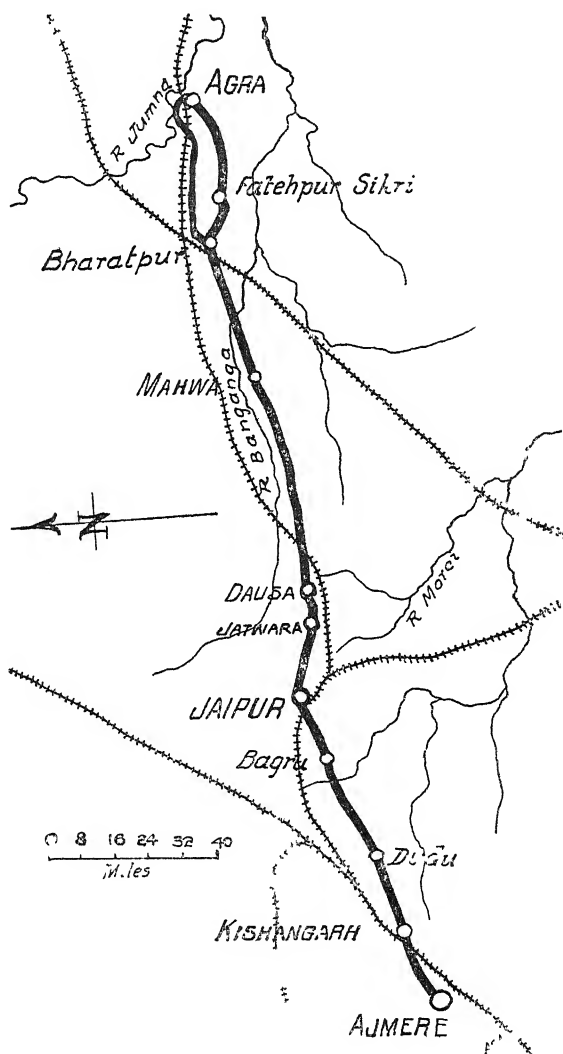
It may be added that it is just possible to go from Jaipur to Ajmere, a distance of 83 miles; but it needs resolution, owing to the difficulties of crossing some of the streams. Motoring beyond Ajmere is at present impossible (Appendix F).

## OBJECTS OF INTEREST.

*Jaipur*—Chief excursion is to the ruined city of Amber, founded in the eleventh century, and the capital of Jaipur till 1728. Jaipur itself is the present capital, being very picturesquely situated and surrounded on all sides by rugged hills crowned by forts. The streets and bazaars are especially attractive. The famous Observatory

*Ajmere*.—City of great antiquity and celebrity. The Jain Mosque of Arhai-din-ka-Jhonpra and the Moslem tomb, entitled the "Dargah."

*Bharatpur*.—Fortified Jat city; besieged by the British on several occasions early in the nineteenth century.





## GWALIOR TO SAUGOR, via JHANSI, 189 MILES

Good and level road to Jhansi (68 miles), skirting the Indian Midland Railway. The crossing of the Sind River is difficult, but in the dry season there is a temporary bridge. A similar difficulty is furnished by the Betwa River, on the way to Lalitpur. The run from Lalitpur across the border of the Central Provinces to Saugor is good, although the road is not reckoned by the authorities of the latter as first class. There is a steady, easy rise from Lalitpur to Saugor. There is much jungle.

## MILEAGE TABLE

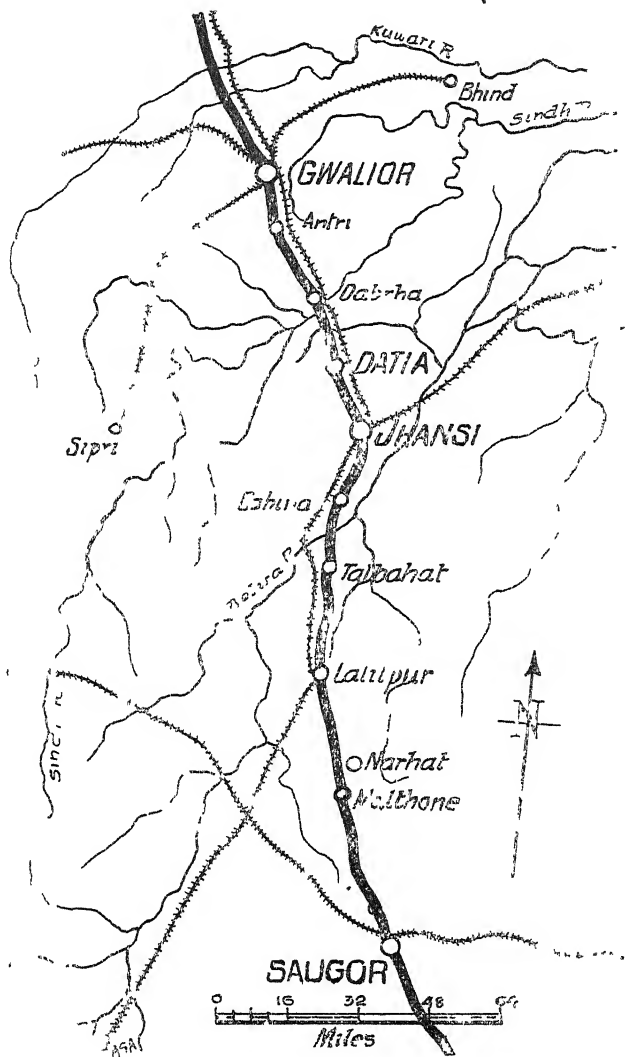
	Miles		Miles.
Gwalior—			
Dabhā	30	Talbahāt	99
Datta	51	Lalitpur	124
Jhansi	68	Malthone	152
Babuna	84	Saugor	189

## OBJECTS OF INTEREST

*Jhansi*—Fort of enormous strength, granite built, with walls 16 to 20 feet thick. Magnificent situation, with superb views. Stormed by the British, 1858.

*Saugor*—Curious old Mahratta fort of twenty round towers. Picturesque town on a fine lake, with large bathing ghats and Hindu temples on its banks.

*Sanchi Tope*—About 50 miles west of Saugor, near Bhilsa, R.S. Great Stupa, pillars, and relics dating from time of Asoka (250 B.C.)



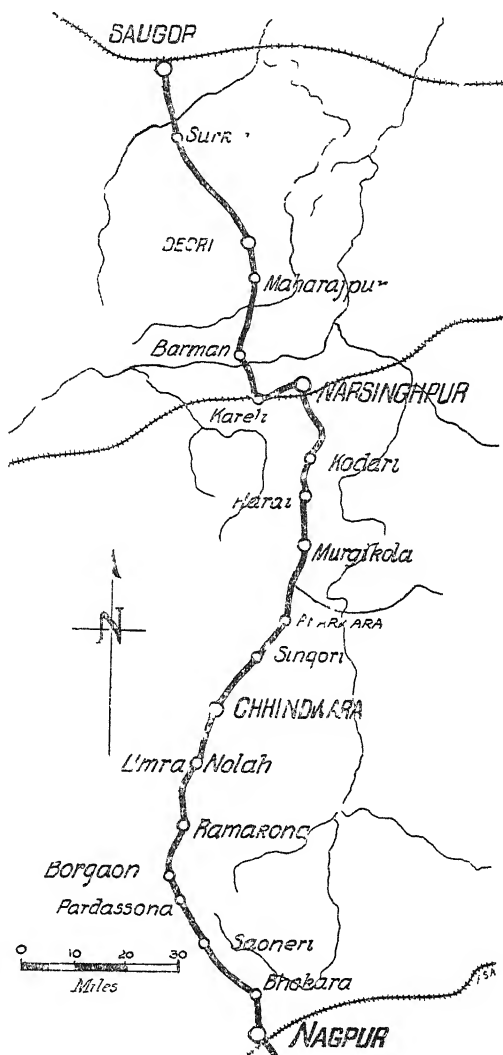
SAUGOR TO NAGPUR, VIA CHHINDWARA,  
200 MILES.

First class road all the way to Nagpur, but very hilly in places, and during parts of the year difficult, as, despite some bridges there are still innumerable unspanned nullahs. This is particularly the case between Chhindwara and Nagpur. Motorists will find the road at its best after December and in the dry season.

North of Surkh, near Chitor, is the Bewas River, with a temporary stone causeway, while the Nerbudda has to be crossed south of Barman, by a ford in the dry season, and by ferry in the rains. It is 220 yards wide. Karel is  $74\frac{1}{2}$  miles from Saugor.

OBJECTS OF INTEREST

*Nagpur*—The capital of the Central Provinces. An attractive civil station. The district has upwards of two million aborigines called Gonds, the hill section of whom have flat noses, thick lips, and black skins. They worship cholera and smallpox.



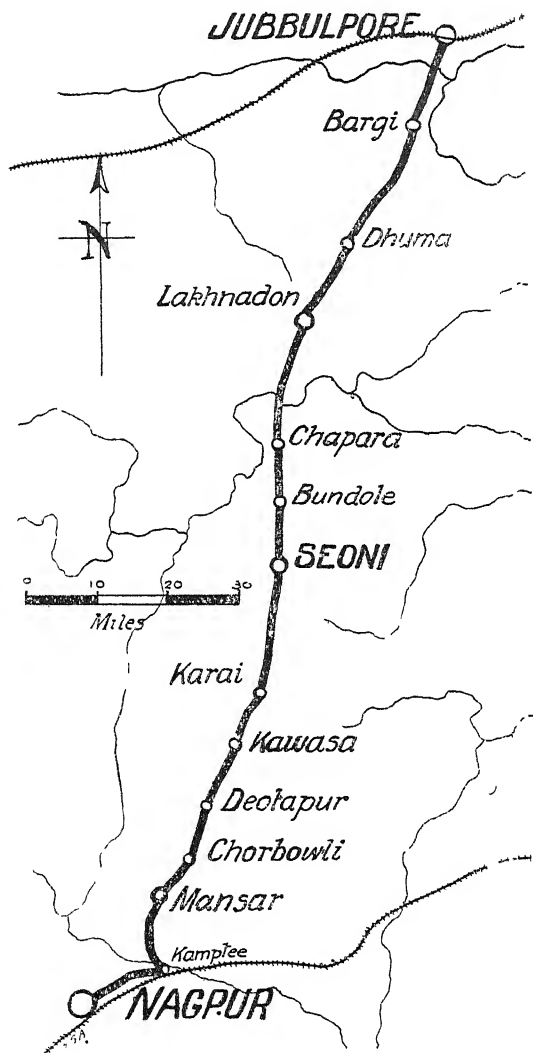
## NAGPUR TO JUBBULPORE ... 151 MILES

Excellent metalled road

Beyond Mansar, near which village the road passes the picturesque temple-crowned hill of Ramtek, forest land and undulating country are met with as far as the foot of the Korai Ghát, which is about 60 miles from Nagpur. From this point the road ascends 1,100 feet in about 7 miles, passing through some very beautiful forests of teak and bamboo. Although tortuous, the road has no dangerous curves, while the steepest gradient is 1 in 25. On reaching the summit the traveller is rewarded with a view of the very finest plateau in the Central Provinces, the country being open, but interspersed with patches of forest, and surrounded by well-wooded hills.

At a distance of 80 miles from Nagpur the town of Seoni, with its lovely tank, gardens, and avenues of lofty bamboos, is reached. From thence to the Dhuma Ghát, by which the road descends into the Nerbudda Valley, the scenery is much the same as that between Seoni and the Karai Ghát. At Chapara the Wainganga, a stream regarded as a fetish by the aboriginal tribes, is spanned by a fine bridge. The Dhuma Ghát, though somewhat steeper than the Karai Ghát, is equally picturesque, and on arriving at its foot level country is encountered, offering an easy run of 20 miles to the Nerbudda River, where there is a commodious ferry. From the ferry to Jubbulpore is a distance of 5 miles over an easy road.

The famous 'Marble Rocks' are 11 miles from Jubbulpore, the road is quite good.



## JUBBULPORE TO ALLAHABAD, 219 MILES.\*

TABLE OF MILEAGE

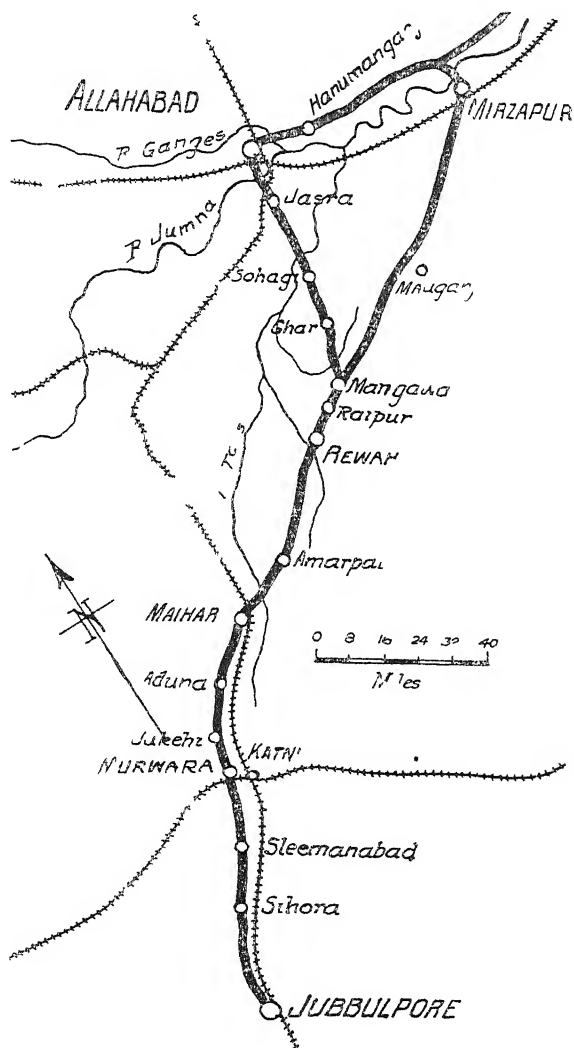
	Miles		Miles
Sleemanabad	40	Lour	157½
Munwara	56	Mauganj	179½
Subahganj	73	Drummondganj	205½
Munhar	97½	Lalganj	220½
Kacwah	139	Mirzapur	241
Kaipur	149½	Naighat	245½
Mungowa	157½	Gopiganj	257½
		(Grand Trunk Route)	
		Allahabad	299½
Sohagi	184½		
Jari	200		
Allahabad	219½		

The road to Katni (54 miles), by the side of the railway is quite good and though there is a gradual descent, fairly level. Proceeding north, the surface which is metalled improves. Rewah is about 1,000 feet above sea level.

Just over 100 miles from Katni, and 15 miles beyond Rewah is Mungowa (dik bungalow), and here the road forks. The shorter but not the better, road, as it is unmetalled, turns to the left almost due north, traverses a slight elevation to the south of Sohagi, and then approaches the Lons River. This must either be crossed by boat or a small boat bridge. Then it is a short run by Jari and over the Jumna to Allahabad.

The other route which is rather better is also much longer. It traverses Mirzapur (dik bungalow) where the Ganges must be crossed to effect a junction with the Grand Trunk Road. The joining road from the river is good. The motorist has then to retrace his steps westwards. On the whole, the shorter route is preferable.

\* By the shorter route, the longer will add about 80 miles more.





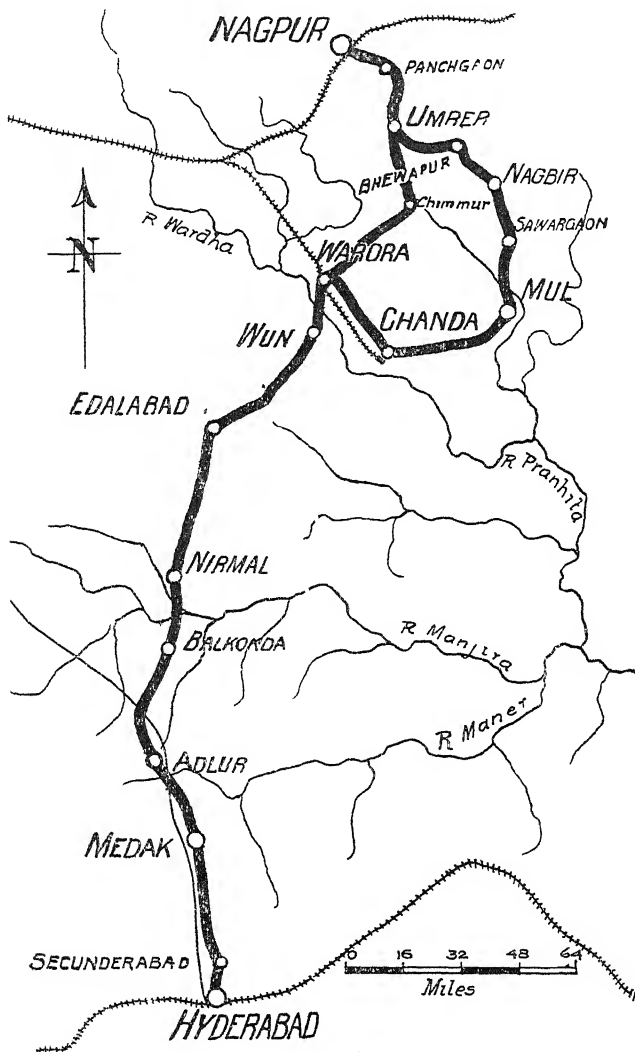
## NAGPUR TO HYDERABAD

310 MILES.

	<i>Miles</i>
Nagpur to Warora	67
Warora to Edalabad	57
Edalabad to Hyderabad	186
Total	<hr/> 310

This is, perhaps, the best route to Hyderabad. From Nagpur to Warora there are two routes, forking at Umrer. The one goes due south through Chimmur, Chargaon and Segaoon, the other runs in a south-easterly direction, passing through Bhewapur and Nagbir, and thence due south to Sawargaon and Mul, whence it bears to the right near the town of Chanda\*. Thence the road bends north-west to Warora. Here there is a good metalled road due south, passing through Wun, Edalabad, and Nirmal, beyond which the River Manjira has to be crossed. The road then goes due south to Adlur, whence it follows the line of the railway to Secunderabad and Hyderabad. In places the road is somewhat uneven, and after falling about 400 feet from Nagpur to Wun, it then rises steadily about 1,200 feet to Hyderabad.

\* By the shorter route. The other longer, but perhaps better, road to Warora adds 50 miles to the distance.



## CALCUTTA TO PURI ... 300 MILES.

Calcutta to Midnapore	...	...	68 miles.
Midnapore to Balasore	..	...	76 "
Balasore to Cuttack	..	...	105 "
Cuttack to Puri	..	...	51 "

Total	...	...	...	300 "
-------	-----	-----	-----	-------

Puri is the new, and perhaps the sole, watering-place of Bengal. It is therefore coming into popularity. It is, further, a town of great Hindu sanctity, as here the procession of the Juggurnath Car takes place annually. The road is metalled throughout and fairly good, but there are innumerable unbridged rivers. The motorist leaves Calcutta to the south-west for Achipur, where there is a ferry across the Hooghly, the process of embarking and disembarking the car being difficult. Some miles farther on there are similar crossings over the Rivers Damedar, Rupnarain, and Kossai. Thence the road goes almost due west to Midnapore, and thereafter throughout its whole course it follows fairly closely the railway line. The Kossai can in dry weather be forded near Khargopur, as also the Subarnarikha at Gorikhal, and the Buraballang near Balasore.

Before reaching Cuttack there is another series of river crossings, all fordable save in the rains. Care must be taken on leaving Cuttack to take the road for Sardaipur. Puri itself is approached over a magnificent old bridge, probably dating from the middle of the eleventh century. Although the road is a very long one from Calcutta southwards, it is hardly possible to lose one's way, as there are few side turnings of any importance. Careful driving, is, however, vital, owing to the heavy traffic on the roads and the innumerable nullahs.

The following is the table of mileage to Cuttack :

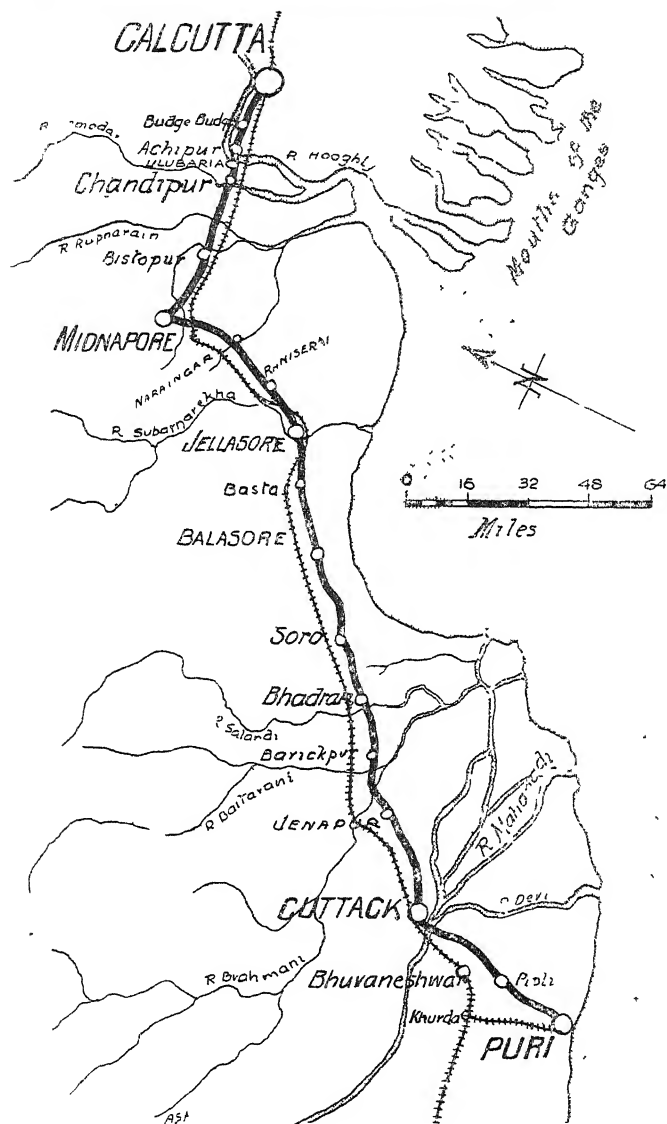
Budge-Budge	...	13 miles.	Balasore	...	144 <sup>3</sup> miles.
Panchkura	...	43 "	Sono	...	166 <sup>3</sup> "
Midnapore	...	68 <sup>3</sup> "	Bhadrak	...	187 <sup>3</sup> "
Jaleshwar	...	116 <sup>3</sup> "	Cuttack	...	249 <sup>3</sup> "

## OBJECTS OF INTEREST.

*Cuttack.*—Ruins of an old fort ; centre of the network of the Orissa Canals.

*Bhuvaneshwar.*—This place, which is 20 miles from Cuttack, can be approached by car, although a palanquin must be taken for the visit itself to the famous caves. In addition to the caves there are famous temples, the "Great Temple" being, perhaps, the finest example of a purely Hindu temple in India. Around the sacred lake are still many shrines. The place itself is at least 1,500 years old.

*Puri.*—The Juggurnath Temple. The festival of dragging the car through the streets usually takes place in June or July. The well-known "Black Pagoda" is about 18 miles from Puri.

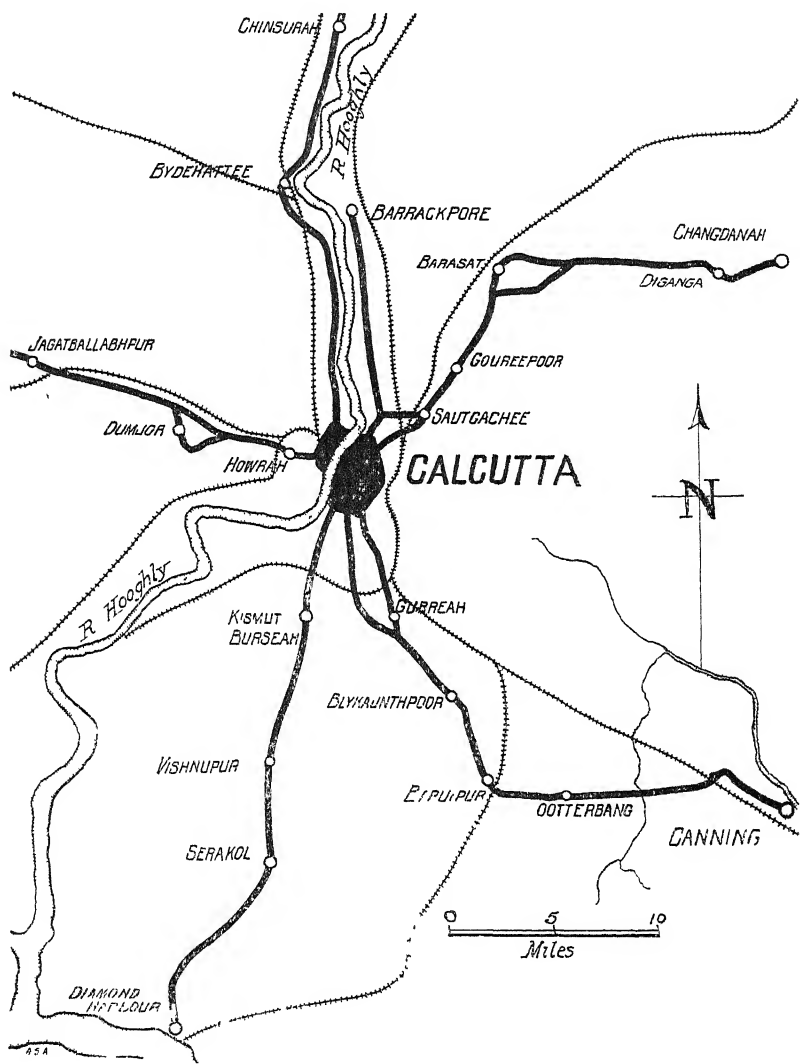


## CALCUTTA AND ITS ENVIRONS.

A few excursions of interest may be made round Calcutta, but they are by no means as good as in Madras. The surface of the roads is only medium, and the traffic is very heavy indeed. It is an easy run without any difficulty to Diamond Harbour (south-west). To Canning there is an equally straight run, with one river crossing the other side of Baruipur, and two or three bad pieces of road in the same district.

To the west there is a straight, but not very interesting, run, apart from the native life, to Jagatballabhpur. There is also a pleasant little run across the Hooghly Bridge—the only road bridge across the stream—to the Botanical Gardens, farther down on the right bank of the river. To the north the Grand Trunk Road skirts the right bank of the river; on the left there is quite a good road to Barrackpore, where there are some handsome buildings and temples. Finally, there is a road to Barasat and Basirhat, north-east of Calcutta, but this is a trip which is only interesting to a student of native life and customs. Basirhat lies to the east of Changdanah.

These runs are all within a radius of 20 to 30 miles. Further details as to other possible runs will be supplied by the Automobile Association of Bengal, 57, Park Street, which is publishing maps on the subject.



## CALCUTTA TO DARJEELING, ABOUT 375 MILES.

	Miles.
Calcutta to Krishnagar .. ..	66*
Krishnagar to Berhampore .. ..	55
Berhampore to Dinajpur .. ..	128
Dinajpur to Titlia .. ..	71
Titlia to Darjeeling .. ..	55
Total .. ..	375

This is a possible route, though no one should attempt it who is not prepared for great difficulties and many inconveniences. Particularly should it be avoided in the wet weather, as portions of the road are unmetalled, and break up easily, and the dust changes rapidly to thick mud. Still, it has many attractions, being off the beaten track, and in places very picturesque. Special care is needed as regards supplies of petrol.

Probably the motorist will be well advised to take the train to Damukdia Ghat, whence there is a large and comfortable steam ferry across the Ganges to Sara Ghât. This ferry works in conjunction with the trains, and so runs regularly. Excellent food is obtainable on board. The actual journey across lasts about twenty minutes, but the preparations for the start and disembarkation usually take another forty. From Sara Ghât running is fairly good to Rampur Boalia, Godagari, and so north to Dinajpur. The motorist can also entrain from Calcutta to Murshidabad, but the best trains are on the other route.

Still, assuming that the motorist wishes to motor the whole distance, it is best for him to cross the Ganges at Lalgola Ghât and Godagari, where there is also a steam ferry. The road due north from Calcutta roughly keeps to the left-hand side of the Hooghly, and skirts the railway to Murshidabad. It passes through Barrackpore, Sannuggur, and Kanchrapara, the surface being level and well metalled, though the traffic is heavy and going must be slow. At Kanchrapara it makes a big curve to the right by Kopeenessore. Here join the road from Barasat due north to Semahaut, and thence go north again to Chakdaha, making for Ranaghat. Incidentally, it may be stated that there is an alternative road—the one just mentioned—bridged and drained throughout, leading from Calcutta to Barasat, from which place it goes due north to Chakdaha. It is, however, only metalled completely as far as Barasat; it is therefore not recommended, although it is shorter. There is partial metalling between Kopeenessore and Chakdaha.

Ranaghat is the railway junction for Sara Ghât (the main line) and Murshidabad (the branch). From here the roads are all unmetalled to Berhampore, immediately (5 miles) to the south of Murshidabad, and they are often heavy, but there are few river or nullah difficulties. The road recommended follows the railway to Krishnagar (Circuit House), Dhubnia, Debogram, Loknathpur, Beldanga, and Gora Bazar (D.B.). From Berhampore there is a good metalled road through Murshidabad nearly as far as Lalgola Ghât (about 150 miles from Calcutta). Fair accommodation exists at both Berhampore and Murshidabad, notably the former.

At Godagari, on the opposite bank, the road, which is, on the whole, very fair, runs due north to Dinajpur through Nischindipur, but it may well be worth making a détour through Gaur, English Bazar, and Malda, since there are

\* By Barasat; it is a few miles longer by the other and better route.

along or near the road archaeological remains of the very highest interest. There is a choice of two roads from Nischindipur, but it is far better to take the left-hand one by Gangarampur, although it is 7 miles longer.

From Dinajpur the road continues north to Titaha, passing through Thakurgaon; it is level and of medium quality. From Titaha it is only a short run (16 miles) to Siliguri, the base of the mountain railway to Darjeeling. From here the road is also practically the railway-line, and permission must be obtained to make the hill-climb to Darjeeling, 40 miles away, and nearly 9,000 feet above the sea. It is by far the most beautiful mountain ascent in India, through dense tropical vegetation; but the line is perpetually intersecting the road, which is very narrow, and often difficult, and there are numerous little villages or townlets, such as Kurseong.

#### MILEAGE TABLE.

For the convenience of motorists wishing to visit Darjeeling a mileage table may be given, it being stated, as a preliminary, that Ranaghat is 48½ miles by the Barasat direct route from Calcutta, and some 12 to 20 miles more by the other (recommended) route. The following official figures are reckoned from Ranaghat as a starting-place, going northwards:

Krishnagar ..	17½	Godagari ..	105½	Thakurgaon ..	237
Debogram ..	40½	Parbatipur ..	135½	Titaha ..	272
Berhampore ..	72½	Nischindipur ..	155½	Siliguri ..	287½
Lalgola Ghat ..	99½	Dinajpur* ..	200½	Darjeeling ..	327

#### OBJECTS OF INTEREST.

*Berhampore*.—Scene of the first overt act of the Mutiny, the native soldiers refusing to receive their cartridges (February 25, 1857).

*Plassey*.—Scene of Clive's victory, June 23, 1757.

*Murshidabad*.—Very prosperous city in the eighteenth century. Many ruins of temples and gardens.

*Gaur*.—Metropolis of India under its Hindu kings; is 4 miles from English Bazar. Superb ruins, notably of the Golden Mosque and the Citadel.

*Panduah*.—Seven miles north-east from Maldah. Formerly the capital of the first independent King of Bengal. Very fine ruins and mosques, notably the Adina Masjid, the finest specimen of Moghul architecture in Lower Bengal.

*Darjeeling*.—Famous hill-station, with excellent accommodation for Europeans. Magnificent mountain scenery, including views of Everest and Kinchinjanga and the Himalayas. Much, however, depends on the clearness of the atmosphere, but the view, once seen, is never forgotten. Good bazaar with quaint hill people.

The time-table of the Darjeeling mountain railway—according to the latest issue—is appended for two reasons: If the motorist is unable to obtain permission to proceed beyond Siliguri, he will be in a position to so regulate his movements that he may avail himself of the trains. If he is able to obtain permission, he will equally well be obliged to study the times of the various trains, so that he may know when they are in his vicinity, as the road is, as stated, very tortuous and narrow. There is excellent refreshment-room accommodation at Siliguri.

\* There are two routes between Nischindipur and Dinajpur, but the one given and recommended is via Gangarampur; the other is 7 miles shorter, but not so good.



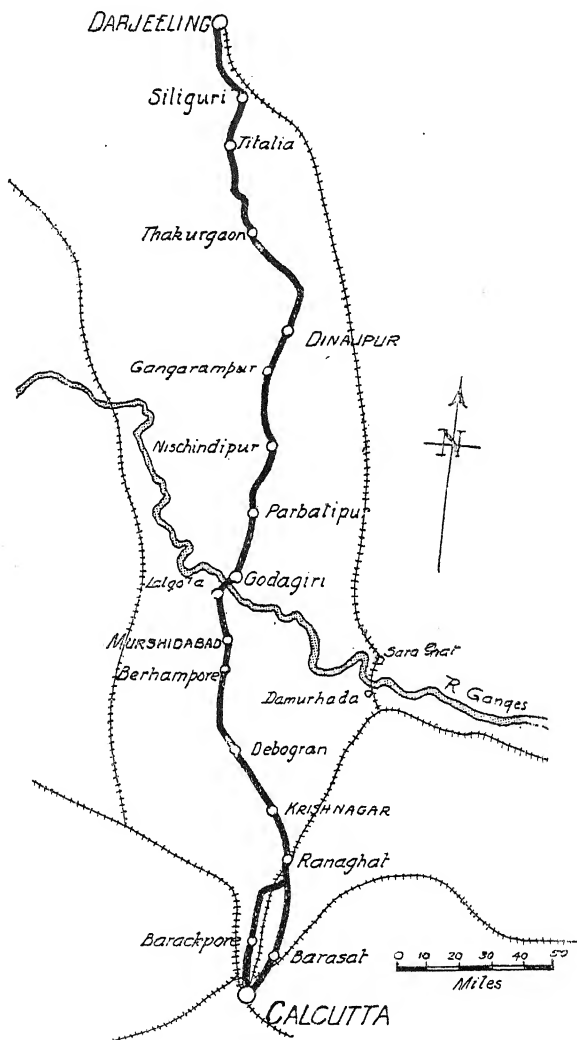
## SILIGURI TO DARJEELING.

Stations.	Daily Local.		Mail Daily Through.		Mixed Daily Through.		Daily Local.	
	H.	M.	H.	M.	H.	M.	H.	M.
Siliguri .. .. d.	—	—	6	20	8	45	—	—
Sukna .. .. {a.	—	—	6	50	9	20	—	—
Rungtong .. .. d.	—	—	6	53	9	25	—	—
Tindharia (r)* .. ..	—	—	Pass.	—	9	52	—	—
Gyabari .. .. {a.	—	—	8	4	10	45	—	—
Mahanuddi .. .. d.	5	5	8	9	10	53	—	—
Kurseong (r)* .. ..	5	36	Pass.	—	11	21	—	—
Toong .. ..	6	9	Pass.	—	11	51	—	—
Sonada .. .. {a.	6	38	9	24	12	16	—	—
Ghoom .. .. d.	6	50	9	56	12	35	15	29
Darjeeling .. .. a.	7	28	10	30	13	11	16	15
	8	5	11	3	13	46	16	52
	8	43	11	14	14	25	17	29
	8	40	11	40	14	37	17	31
	9	9	12	4	15	0	17	55

## DARJEELING TO SILIGURI.

Stations.	Mixed Daily Local.		Mixed Daily Through.		Daily Local.		Mail Through.		Daily Mixed.	
	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.
Darjeeling .. .. d.	6	50	9	44	13	2	14	10	15	45
Ghoom .. .. {a.	7	12	10	8	13	26	14	36	16	8
Sonada .. .. d.	7	16	10	12	13	29	14	37	16	12
Toong .. ..	8	6	11	4	14	8	15	11	16	54
Kurseong (r) .. ..	8	43	11	41	14	43	15	42	17	28
Mahanuddi .. .. {a.	9	15	12	13	15	15	16	12	18	0
Gayabari .. .. d.	—	—	12	41	—	—	16	29	—	—
Tindharia .. ..	—	—	13	13	—	—	—	—	—	—
Rungtong .. ..	—	—	13	46	—	—	—	—	—	—
Sukna .. .. {a.	—	—	14	13	—	—	17	38	—	—
Siliguri (r) .. .. d.	—	—	14	24	—	—	17	41	—	—
	—	—	15	21	—	—	Pass.	—	—	—
	—	—	15	50	—	—	18	54	—	—
	—	—	15	55	—	—	18	56	—	—
	—	—	16	30	—	—	19	29	—	—

\* "r" means "refreshment-room."



## BOMBAY TO POONA ... 112 MILES.

Excellent road in places, but apt to break up here and there. The best way out of Bombay is by way of Queen's Road, Mathew Road, Kennedy Bridge, Gamdevi Road, Grant Road Bridge, Gilder Street, Souter Street, Sankli Street, Byculla Bridge, Patel Road, Sopari Bag Road, and Vincent Road. The milestones from Bombay to Poona are on the right-hand side of the road. Past the 9th milestone Sion Causeway is reached. There is a sharp bend to the right, and before reaching Coorla village the G.I.P. Railway level must be crossed. Past Coorla village, after the 11th mile, a sharp turn to the right conducts to the Thana road, and then a straight stretch of 11 miles leads into Thana. Leaving the dak bungalow on the right, proceed carefully over the Thana bridge, and then, 2 miles later, the road becomes winding, narrow, and unprotected, being on the right-hand side bounded by hills, on the left by the Kalyan Creek. For Bombay to Thana map see p. 85.

Eight miles farther on proceed straight, leaving the Kalyan road on the left. A straight run of 11 miles follows to Panvel. Campoli comes 23 miles farther on, and the ascent of the Bhór Ghát begins, the turnings being sharp, and in places the road extremely narrow. The road surface as far as here has been much improved in the last two years, but is not even yet in first-class condition. In addition, there should be widening and strengthening of the many small, narrow bridges which are fairly frequent between Thana and Campoli. Notice that the milestones on the ghats at Campoli number differently, the distance recorded by the figures being reckoned from Poona.

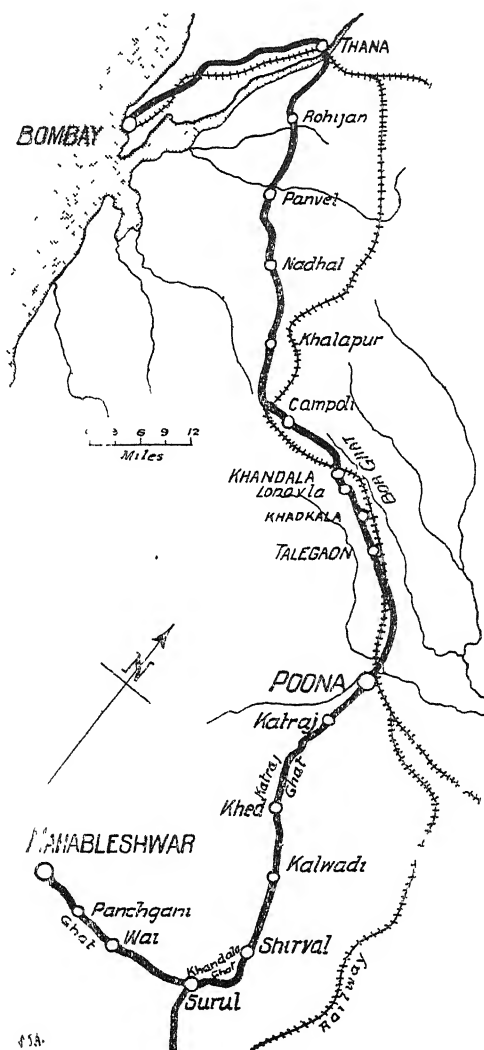
At Campoli it is 47 miles from Poona. After the 42nd milestone, turn to the left for Khandala. After Khandala the road winds considerably till Lonauli is reached past the 40th milestone. At the 31st mile there is a level-crossing, with a sharp turn to the left; the village of Kadkala is 2 miles farther on, and then comes a 14-miles straight run to the level-crossing at Shelar Wadi. A few miles farther off, on a straight run, lies Poona, by way of Kukee Bridge. The mileage is estimated to the outskirts of the city.

## OBJECTS OF INTEREST.

*Lonauli*—Near here is the great rock-cut Buddhist cave at Karla (7½ miles), 160 B.C.; and the Buddhist caves at Bhaja (6½ miles) and Bedsa (5½ miles east of the Bhaja). The two latter date from 200 B.C. In good weather, the caves can very nearly be reached by motor. Lohagad Mahratta, a hill fortress near Karla.

*Khandala*.—Beautiful hill-station, with magnificent scenery.

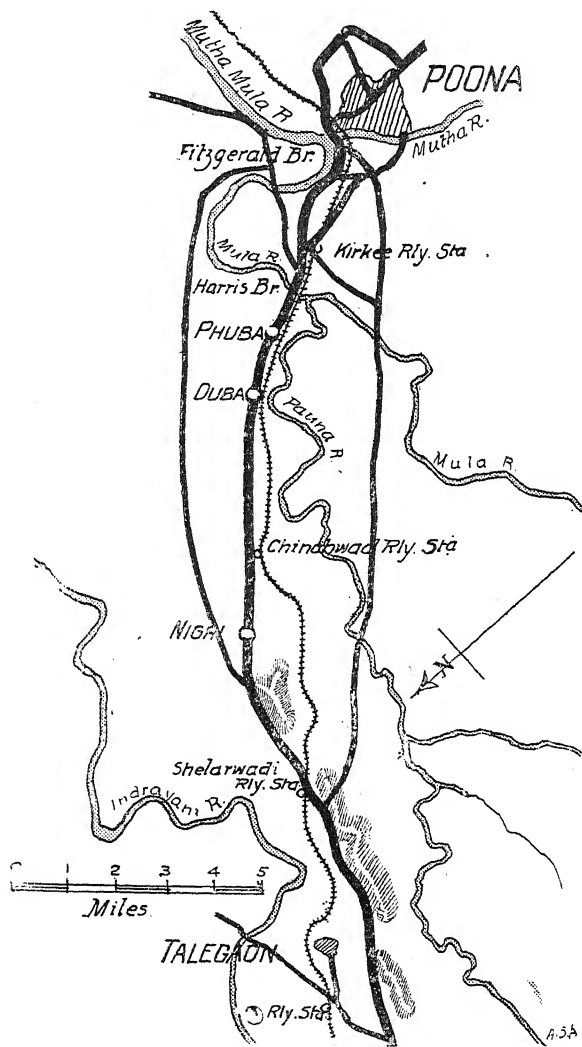
*Kukee*.—Scene of the defeat of the Mahrattas by the British (1817).



## THE APPROACHES TO POONA.

As there are several approaches to Poona from the north, a map is appended showing the choice of routes.

In and about the city the roads are exceptionally good and kept in excellent order, so that short excursions are very attractive.



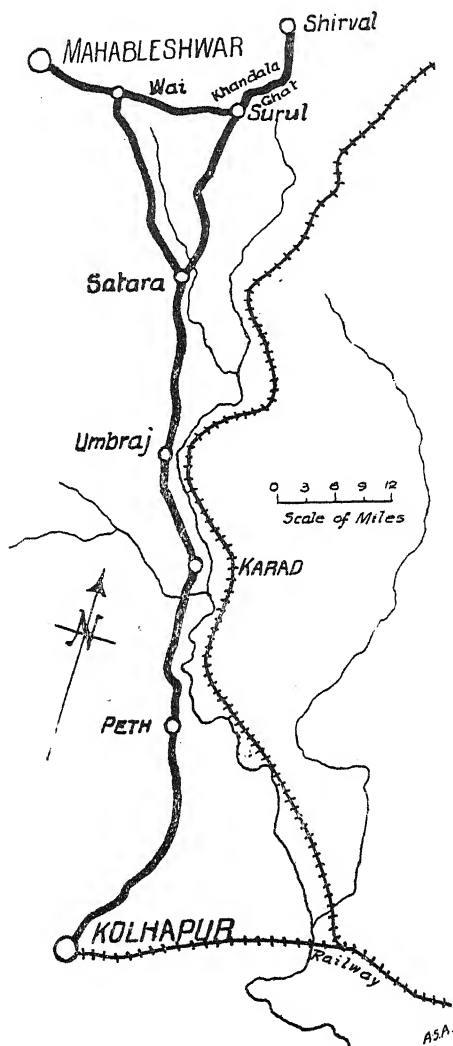
## POONA TO KOLHAPUR ... 144 MILES.

An excellent road throughout. Leave Poona by the Parbatti road, with the Parbatti Temple on the left. Then turn to the left, and 6 miles out ascend the Katraj Ghát, passing through the tunnel at the top. This is the highest point, and care should be exercised in driving through. After passing the tunnel there is a sharp decline, with two sharp S turns, and the ghát ends at the 14th milestone. Thereafter the running is easy, passing Shirval, where there is a good dák bungalow, to the Khandala Ghát—41 miles out. This ghát is about 3 miles in length. At Surul ( $47\frac{3}{4}$  miles) the road goes off to Wai and Mahableshwar. It is easy running to Satara (68 miles), where care is needed in negotiating difficult corners; and thence it is a straight, easy course to Kolhapur, 76 miles away.

## OBJECTS OF INTEREST.

*Kolhapur.*—Very ancient temples. Capital of Kolhapur Native State. The hill-fortress of Panhala (12 miles north-west) is one of the most interesting in Western India; stormed by the English in 1844. Excellent road right into the fort.

See also the map on p. 161.





## POONA—SURUL—MAHABLESHWAR,

75 MILES.

Excellent road throughout—one of the best in India.

Pass through the Poona cantonments to the Shanker Shet Road and on to the Satara Road. A run of 6 miles and the ascent of the Katraj Ghât begins, the tunnel being at the highest point, after coming out of which there is a sharp decline, with two acute S turns. Past the 14th milestone the ghât ends. Shirval is at the 31st mileage, and 10 miles farther the Khandala Ghât begins, and ends at the 44th mileage. At Surul (47½ miles) the road to the right leads to Mahableshwar. Past the 54th mileage Wai village is reached. Motorists must proceed with great caution through the village, as the roads are narrow, with sharp, right-angle turns, and are full of traffic. After crossing the bridge past the village, the ascent of the Wai, or Pasarni Ghât, begins at mileage 56. Near the 63rd mileage Panchgani, on the left-hand side of the road, is reached. From Panchgani to Mahableshwar the road is a series of sharp V and S shape turns, in going over which great caution should be exercised. The distance from Poona is about 75 miles

## OBJECTS OF INTEREST

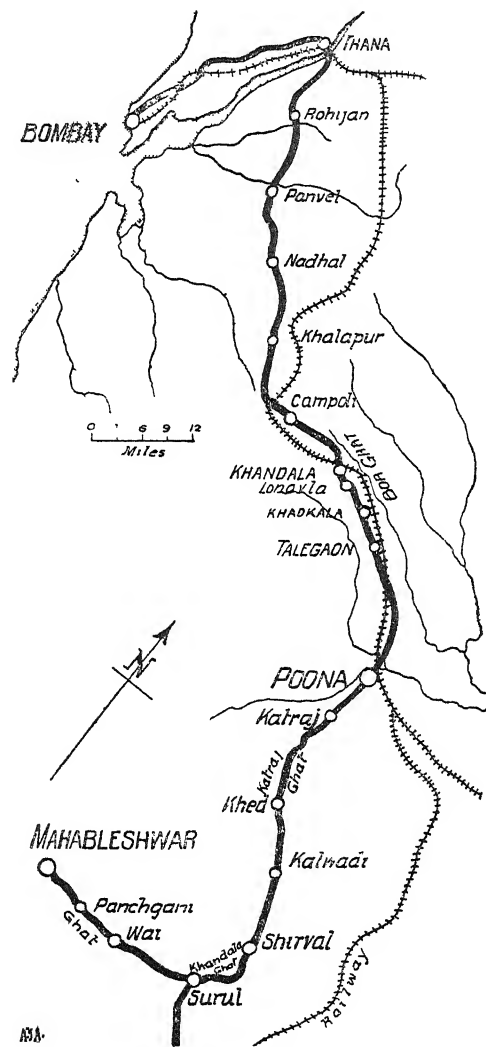
*Poona.*—Seat of the Bombay Government during the rains, and headquarters of an Army Division. Parbatti hill-temple consecrated to the Goddess Durga. Ruins of the Peshwa's Castle. Bund Gardens.

*Karkee.*—Large Artillery depôt, Arsenal and ammunition factory. Scene of British victory over the Peshwa Baji Rao in 1817, Ganeshkhind the Governor's residence.

*Sinhgari* (15 miles away, south-west).—Very fine and picturesque old fort, famous in Rajput history.

*Wai.*—One of the most beautiful rustic towns in the Deccan. A place of great sanctity, owing to its many temples on the Krishna or Kistna River.

*Mahableshwar.*—Charming and well-wooded hill-station, summer-station of the Bombay Government. Near by are the falls of the Yena (500 feet); Elphinstone Point, where there is a sheer descent of 2,000 feet; Arthur's Seat, a superb view; and Pratabgarh, a picturesque hill-fort on a precipitous rock, notorious as the stronghold of the freebooter Shivaji, the founder of the Mahratta Empire. Touring cars cannot enter the town, but must be garaged on the outskirts.



## SURUL—MAHABLESHWAR—SATARA.

## SURUL TO SATARA

	<i>Miles</i>
Poona	
Kat aj	6
Shirval	32
Khandala	39
Surul	48

## TO SATARA

	<i>Miles</i>
Bhuinj	55
Pachwad	57
Anawari	62
Satara	69

## TO MAHABLESHWAR

	<i>Miles</i>
Wai	55
Pasarni	58
Panchgani	63
Mahableshwar	75

From Wai to the junction of the Surul Satara Kolapur road is between 6 and 7 miles

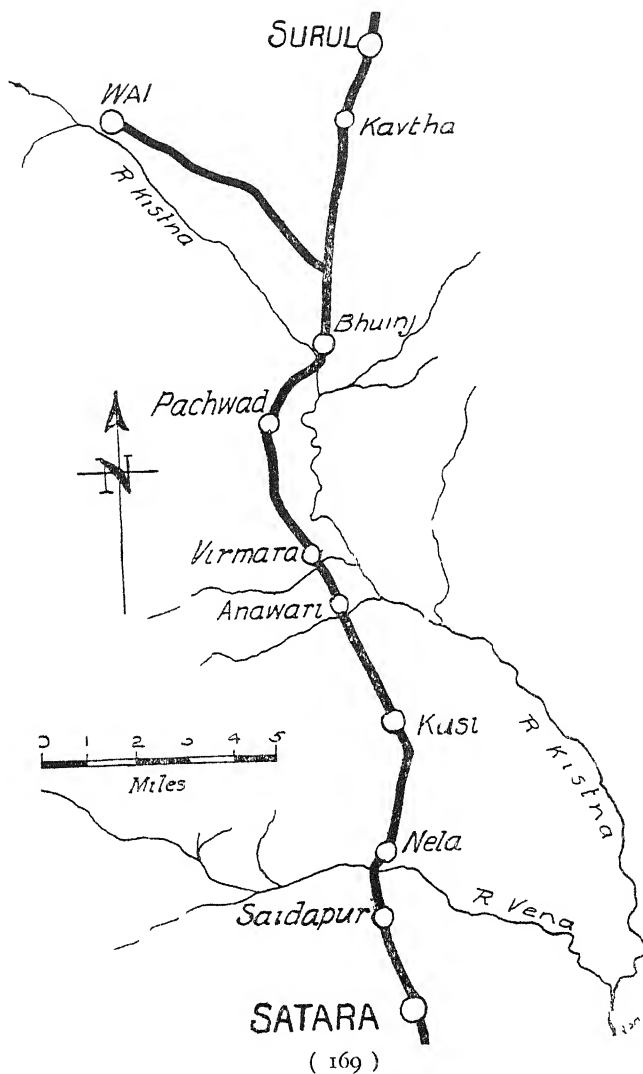
From Surul it is about 27 miles to Mahableshwar (see map on p. 170). There are two roads from Mahableshwar to Satara—the one by Wai (42 miles) and the other by Medha (32 miles). From Satara to Surul it is about 20 miles.

In the case of the longer route from Mahableshwar to Satara retrace the route to Wai, where it is necessary, beyond the village to turn to the right—the Wathar road—instead of to the left. By this road, which is an easy one, and crosses the Krishna or Kistna River between Bhuinj and Pachwad, Satara is 42 miles from Mahableshwar.

In the other case, descend the Satara Ghat, beginning 2 miles out. The descent which is marked by many dangerous turnings, ends 16 miles from Mahableshwar. After this, right up to the Satara Poona road, there is a series of Irish bridges, needing most careful driving. The junction with this road is effected 2 miles out from Satara, the total distance being 32 miles.

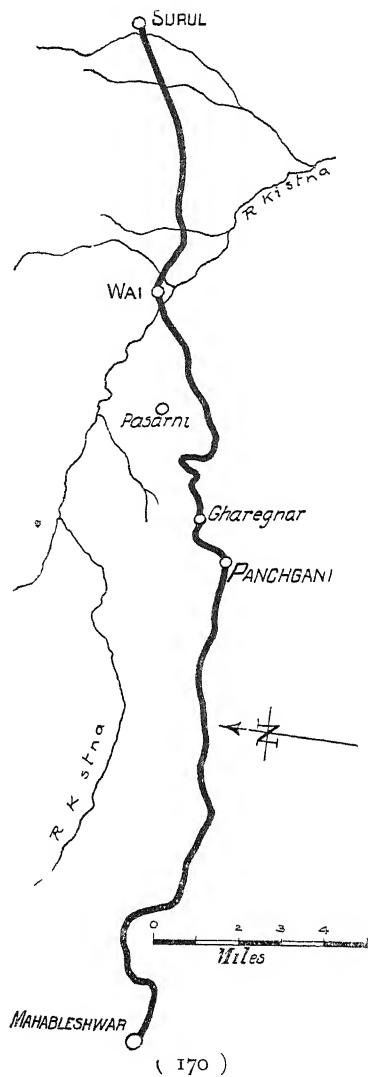
## OBJECTS OF INTEREST

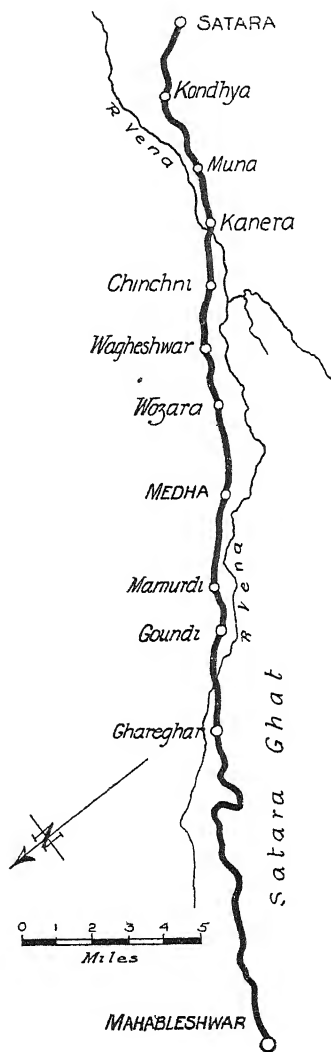
*Satara*—Finely situated old fort, said to have been built about 1200. Held by the Mahrattas, besieged and taken, after great efforts, by the Moghuls in 1699. The New Palace



SATARA

( 169 )





## KOLHAPUR TO HARIHAR

207 MILES

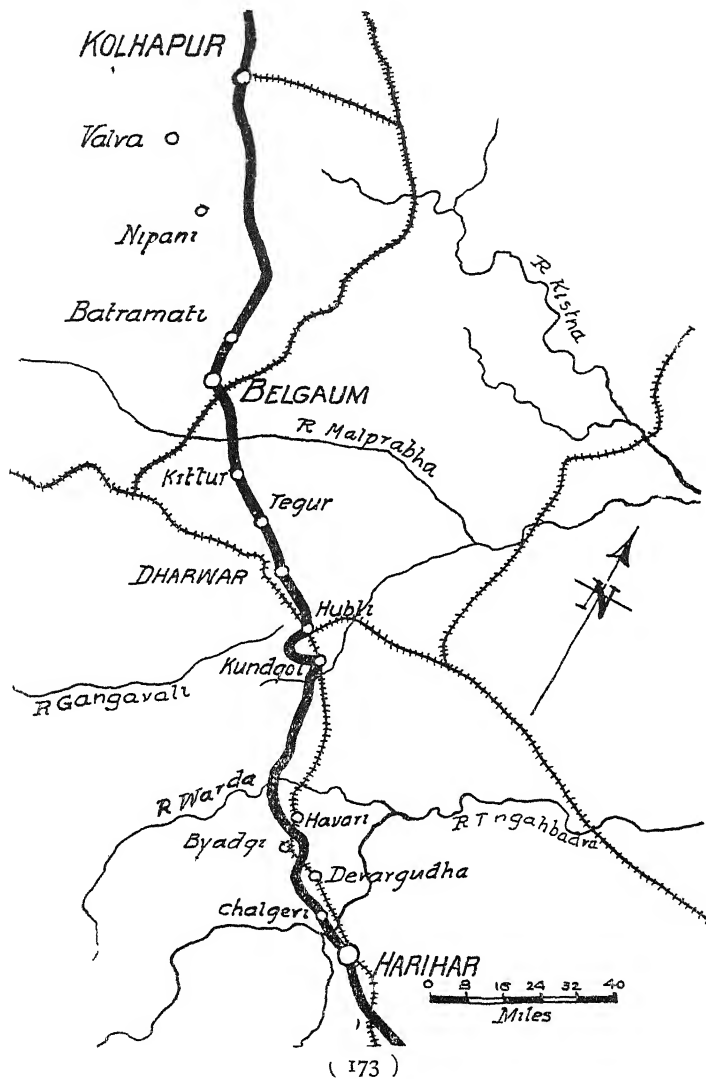
This route is little known to motorists, but it can be attempted with confidence provided full arrangements are made in advance for the supply of petrol. The road, which is fairly level throughout, varies between 2 000 to 2,500 feet above sea level. To Belgaum it is 66 miles; thereafter the route lies through Bagevadi—where keep to the right—Mugutkhan Hubli, Kittur, Tegur, Momigalli, and Dharwar.

The road from Belgaum to Kittur is especially good for motors, but it has the Malpiabha River in the middle, about 17 miles from Belgaum, which is not bridged. However, the river has no water at all in the hot season. There is a dak bungalow at Mugutkhan Hubli, 17 miles from Belgaum. From Dharwar the road runs direct through Hubli. Here again the surface is very fair.

After leaving Hubli the road takes a wide sweep westward from the railway line rejoining it at Havari. The distances from Poona as shown on the milestones are, Hubli 274, Trimalkop 287, Shiggaon 301, Bankapur 305, Warda bridge 312, Havari 320. At Trimalkop a road to Sirsi branches off.

## OBJECTS OF INTEREST

*Belgaum*—Two interesting Jain temples. A visit can be paid from here to the exceptionally interesting Portuguese colony of Goa, with the tomb and shrine of St. Francis Xavier (1696).





## HARIHAR TO BANGALORE

174 MILES

Via Kadur	214 miles
Via Hiriyur	174 „

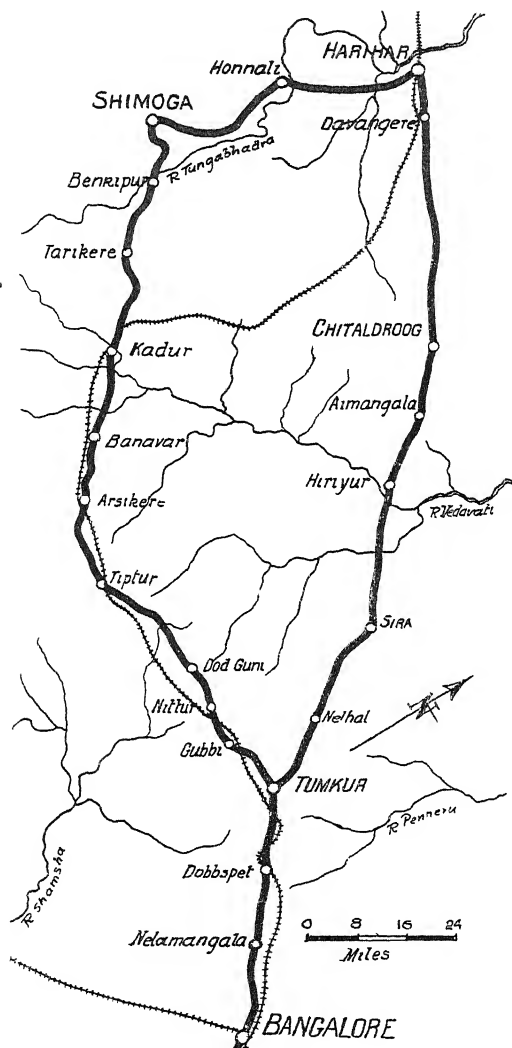
The road from Harihar to Bangalore is less well known to motorists, so the distances may be given in detail. There are two alternative routes both are metalled and in fair condition, and neither presents any very serious difficulties. Perhaps the Hiriyur road is the less level, as there is a considerable drop after Chital droog, and a subsequent climb to Tumkur, after which place, where the routes join, there is another ascent to Bangalore. The two routes may thus be summarized

I		
	<i>Miles</i>	<i>Furlongs.</i>
Harihar to Honnali*	23	6
Honnali to Shimoga†	25	3
Shimoga to Tarikere*	24	2
Tarikere to Kadur*	19	0
Kadur to Banavar	14	4
Banavar to Arsikere	9	2
Arsikere to Tiptur	15	4
Tiptur to Tumkur	42	0
Tumkur to Bangalore	41	2
Total distance	214	7

N B—Arsikere is the headquarters of a Taluq, and an engine changing station on the Southern Mahratta Railway, with a small workshop. There is a Government dâk bungalow near to, and a

\* Taluka headquarters, with third class travellers' bungalow

† District headquarters, with first-class travellers' bungalow.  
Terminus of Birur-Shimoga branch of the S.M.R



refreshment-room in, the railway-station. Arsikere is very prettily situated at the foot of a hill

## II.

	<i>Miles.</i>	<i>Furlongs.</i>
Harihar to Davangere ...	9	0
Davangere to Chitaldroog† ...	40	0
Chitaldroog to Hiriyur* ..	26	4
Hiriyur to Sira† ..	24	0
Sira to Tumkur† ..	33	4
Tumkur to Bangalore ...	41	2
Total distance	174	2

N.B.—All rivers on this route are bridged. From Davangere to Tumkur there is another road via Holalkere, Aosadurga and Hulujar, but it is less interesting.

As regards the longer route, it is necessary to cross the Tungabhadra before entering Honnali. The river is very low in December, but a special ferry for motors will have to be prepared. The Deputy-Commissioner and the Executive Engineer, Mysore P.W.D., Shimoga, may be addressed in connection with this, either directly or through the Government, the latter, however, being preferable. The river crossing may, however, be avoided if a détour to the left is made via Sulekhere tank and Channagiri to Benkipur between Shimoga and Tarikere.

\* Taluq headquarters, with travellers' bungalow,

† District headquarters, with travellers' bungalow.

POONA TO MALEGAON VIA AURUNGABAD,  
220 MILES.

Good metalled and bridged road as far as Ahmadnagar (74 miles) Cross Mula Mutha River by Fitzgerald Bridge below Bund Gardens, then turn to the right. Pass Koregaum (17 miles) and Sirur, (41 miles) Bridge over Ghodnadi, and ascend easy ghat. Leaving Ahmadnagar, bear north-east along metalled road, crossing Shendi River (5 miles), and Godavari River (26 miles), 300 yards wide, both unbridged. Traveller's bungalow at Toka. Aurungabad Cantonment is 69 miles from Ahmadnagar. The route to Malegaon on the Bombay Agra Road is via Dowlutabad (8 miles), and Nandgaon (54 miles) along a well-made road over Kasari Ghat. After leaving the railway at Nandgaon, the streams are unbridged, but passable. Branch road from Dowlutabad to Roza and Ellora Caves (8 miles) up fairly steep ghat, but quite practicable.

From Ahmadnagar there is a metalled road to Nasik (97 miles), meeting the Poona Nasik Road (130 miles). Several of the streams on these roads are unbridged, but they do not present any serious difficulties. The Darna River between Sinnar and Nasik has steep banks. Ahmadnagar to Dhond (47 miles). Good road; bridged except at Bhima River, near Dhond, joins Poona Sholapur Road, near Patas.

OBJECTS OF INTEREST.

*Koregaum.*—Monument. Scene of British victory over Mahrattas.

*Ahmadnagar or Nagar.*—Important military station. Mahomedan fort built in sixteenth century, in good preservation. Taken by General Wellesley from Mahrattas in 1803. Tomb of Salabat Khan, and of Chand Bibi, the famous Queen, who led her troops against Akbar in 1605

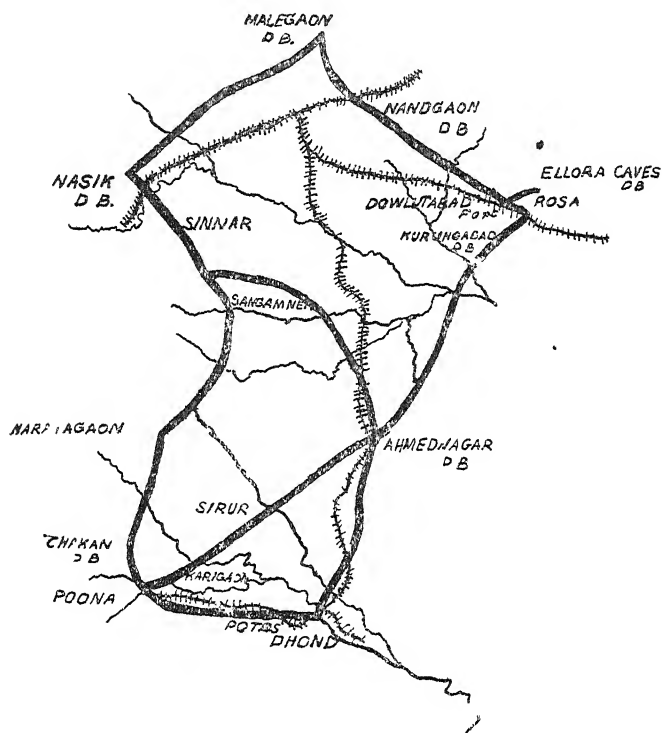
*Aurungabad*—Mausoleum of Rabia Durrani, wife of Aurungzebe,

built partly of marble in imitation of Taj Mahal at Agra. Mosque containing curious water mill. Caves on outskirts of city.

*Dolhatad* —Massive fortress on rocky hill with scarped sides, surrounded by extensive fortifications crumbling to decay. Taken by Moghuls in thirteenth century. Fine view from pavilion on summit. Lofty minaret near entrance to citadel.

*Rosa* —Old walled town infested with beggars. Contains tomb of Emperor Anungzebe.

*Cave of Ellora*, 2 miles from Kosa, the largest and most remarkable in India. The temple of Kailasa 90 feet high marvellously sculptured out of the living rock, stands in a large courtyard hollowed out of the hillside.



POONA TO BIJAPUR, VIA PANDHARPUR,  
185 MILES; VIA SHOLAPUR, 212 MILES.

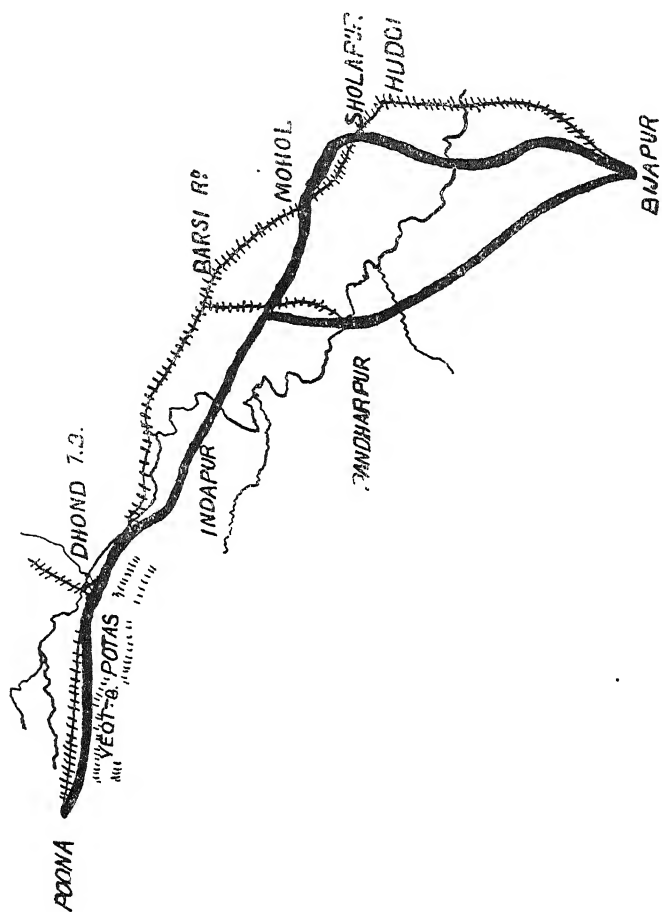
The Poona Sholapur road runs in a south-easterly direction past the racecourse and cemetery. It is in fair condition, except a few sections on which the nalas are unbridged. At Potas, near Dhond (46½ miles) the Ahmednagar Dhond road is joined, and at Hingagaon (80 miles) the Bhima River, 260 yards wide, must be crossed, as there is no bridge; but it can be forded without much trouble, with the assistance of coolies. At Shetphal (100 miles) branch off due south from main road to Pandharpur (118 miles). Here the Bhima River is over ¼ mile wide, but the sandy bed can be easily traversed in the dry season. The road now runs through sterile country, portions of Kolhapur and Jath States, and is rough in parts. Several streams unbridged, but going is fairly level until Bijapur (67 miles from Pandharpur) is reached. Sholapur is 52 miles from Shetphal and the Barsi-Pandharpur crossing, and 152 miles from Poona. There are flying bridges across the Sina and Bhima Rivers between Sholapur and Bijapur (60 miles), and these streams can be also forded in dry weather. There is a better road to Bijapur than the one via Pandharpur, and should be followed for preference.

OBJECTS OF INTEREST.

*Pandharpur*.—On right bank of Bhima River contains a celebrated shrine, which is visited by hundreds of thousands of Hindu pilgrims annually.

*Sholapur*.—Civil and railway headquarters.

*Bijapur*.—Seat of Mahomedan kingdom from fifteenth to seventeenth centuries. Contains old fort with huge guns, and numerous fine mausoleums, musjids, and ruined palaces. The Gol Gumbaz, the great tomb of Mahomed Adil Shah, is near the railway station. The central dome is larger than St Paul's.





## BIJAPUR TO BELLARY

225 MILES

The road is uneven though metalled, and the Krishna and Ghatprabha River between Bijapur and Kalady are unbridged, also the Malaprabha River near Nargund. From Nargund there is a road running due south, past Navalgund to the railway line near Annigeri. Here the Hubli Bellary road is joined, and an easterly direction taken. Bijapur to Hubli, 116 miles, via Nargund and Konnur. The distance from Annigeri to Bellary is 119 miles, via Gadag, Dambal, and Hospet. The Tungabhadra River (unbridged) must be crossed between the two last mentioned places. At Hospet there is a branch road to the Hampi ruins (8 miles). The western portion of Bellary district consists of wild and rugged hills—some ranges with outlines and summits, others split up into masses of enormous bare boulders—while the eastern parts are bare, flat and uninteresting.

## OBJECTS OF INTEREST

*Narand* — Hill Fort

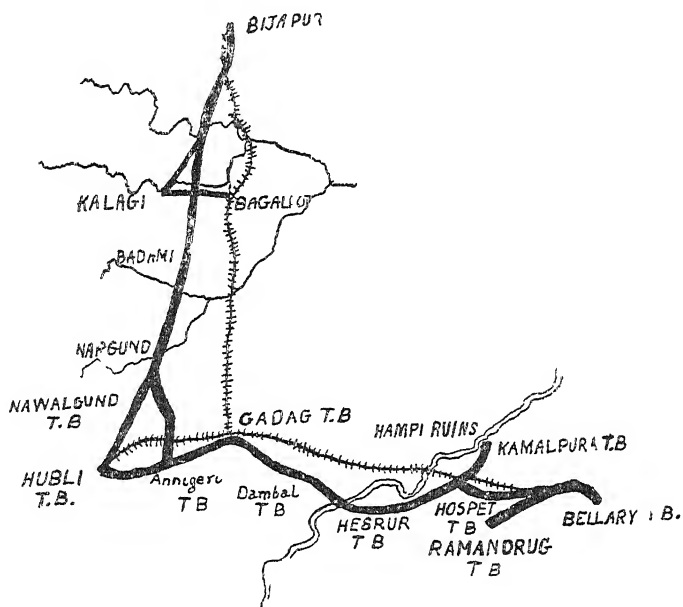
*Gadag* — Dharwar gold fields, 12 miles distant by road

*Hampi ruins* — Eight miles from Hospet on bank of Tungabhadra River. Ancient capital of Vijayanagar kings. Extensive ruins of beautiful sculptured temples and palaces sacked in 1565 by the Mahomedans, who carried off treasure valued at 100 millions sterling. The Vittalswami Temple, House of Victory, and Monolithic Shrine, are all worth a visit. Travellers' Bungalow at Kamalpur.

*Kudur* — Twelve miles from Bellary. Curious mounds of ashes and cinders believed to be the remains of funeral pyres after the wholesale holocausts and suttees on fall of Vijayanagar.

*Ramandurga* — Hill station, 38 miles by metalled and bridged road, 3,200 feet above sea level.

*Bellary* — Cantonment town at foot of two barren rocky hills on one of which stands the fort.



BELLARY TO BANGALORE, VIA HIRIYUR,  
188 MILES; VIA AMANTAPUR, 195 MILES.

The route due south, via Hiriyr, is the best one, the road being bridged and metalled throughout, and the travellers' bungalows well kept. There are several places of interest close to the main route.

## DISTANCES.

	<i>Miles.</i>		<i>Miles.</i>
Bellary to Rampur .	21	Bellary to Hiriyr (join-	
Bellary to Hangal ...	34	ing Poona-Bangalore	
Bellary to Tallak	56	road (see p. 169)	99
Bellary to Challakere	65		

By the second route the distance from Bellary to Amantapur is 65 miles, along a metalled road, but the Hagari and Penna Rivers are unbridged. From Amantapur a fair road proceeds in a southeily direction, bifurcating near Penukonda. The route via Chikbalapur and Devanhalli is preferable. These roads are bridged and metalled in the Mysore country, but are very inferior in the Amantapur District, where the streams have to be forded.

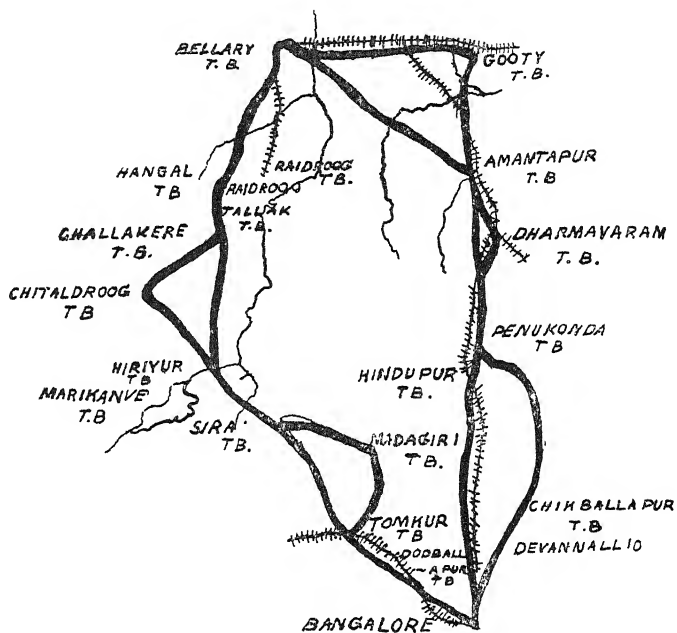
The distance from Bellary to Gooty is 49 miles. This direction must be taken to proceed to Kurnool, thence northwards to Hyderabad.

## OBJECTS OF INTEREST.

*Marikanve Lake.*—Seven miles south-west of Hiriyr. Very large fresh-water reservoir, recently built by Mysore Government, with canals to irrigate the barren parts of Chitaldroog District. Immense stone dam with ornamental coping. The lake is 21 miles in length, and can be crossed by steam launch by permission of the engineer in charge. Good duck shooting in the cold weather.

*Sira.*—Ruined town containing remains of fine buildings erected during the Mahomedan occupation in the seventeenth and eighteenth centuries. Fort Gumma Masjid and tomb of Malik Rihan (date 1650).

*Maddagiri.*—Interesting town surrounded by hills, 24 miles north of Tumkur. Very steep fortified hill, nearly 4,000 feet high, commanding the town. Branch off from Sira (23 miles).



BELGAUM TO KARWAR VIA HALIYAL,  
140 MILES. VIA HUBLI, 166 MILES.

This is a most interesting trip through fine forest and mountain scenery, and is well worth trying. The district is well provided with bungalows, but provisions should be taken, as supplies are not easily obtainable. By the first mentioned route the direction is south to Khanapur (18 miles) crossing the Malprabha River unbridged, then to Alnavar (42 miles) and Haliyal (50 miles). The road then passes through heavy bamboo and teak forest to Yellapur (80 miles), descending the Arbail Ghat 3 miles in length and joining the Karwar—Kumta Coast road near Ankola—after which it is an easy run of about 20 miles into Karwar through undulating forest country. Instead of following the direct road to Haliyal a detour may be made via the Tini pass close to Castle Rock Station, and Supa.

The route from Belgaum to Hubli (64 miles) is shown on p. 165. From Hubli there is a good metalled and bridged road to Yellapur (42 miles) via Kalghatgi. There is another road from Hubli to Kumta on the sea coast via Sirsi and the Devimani Pass (102 miles). It is metalled and bridged except at the Tadi Creek 3 miles from Kumta, where it joins the coast road to Karwar. The gradients on both the ghat roads are steep with sharp corners, the Devimani Pass being less difficult than the Arbayle. A branch road from Sirsi leads to Siddapur and the Geisoppa Falls.

OBJECTS OF INTEREST.

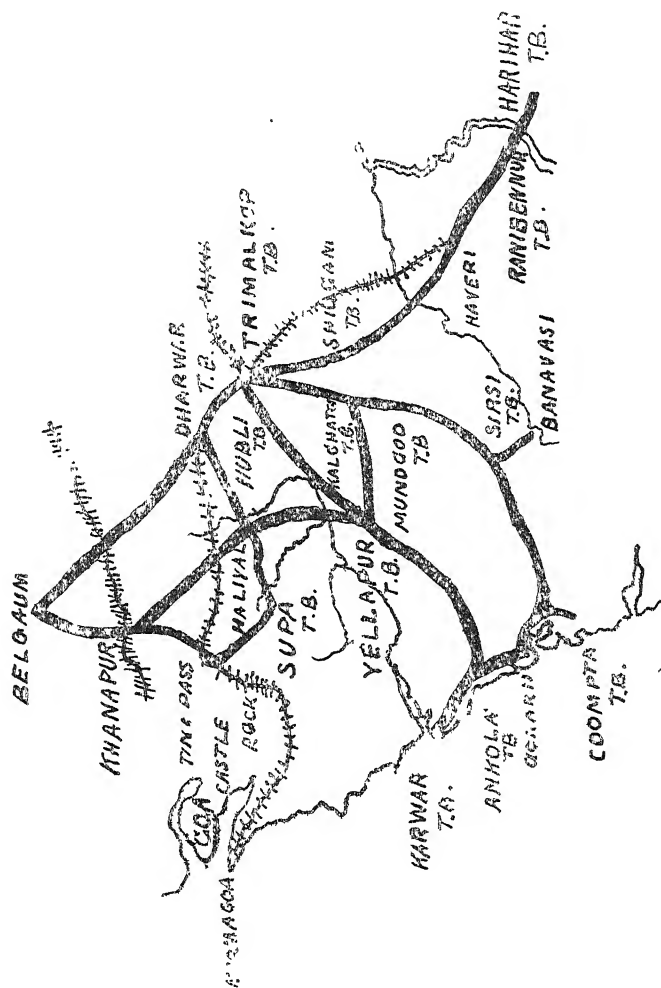
*Castle Rock.*—Pretty hill-station on the crest of the ghats. The Dudh Sagar waterfall is a few miles distant in Portuguese territory.

*Yellapur* in the heart of the North Kanara forest is noted for large game of all kinds. Monument to the second son of the Duke of Somerset, who was killed by a bear.

*Banavasi.*—Richly sculptured temple a few miles from Sirsi.

*Gokarn*, 10 miles north of Kumta. Ornamental shrines and pools.

*Karwar.*—Beautiful harbour fringed with casuarina and palm trees. Coasting steamers from Bombay call here. The London Companies first founded a factory here in 1638.



SIRSI—SHIMOGA—CHITALDROOG, 168 MILES,  
VIA GERSOPPA FALLS.

The road from Sirsi to the Gersoppa Falls via Siddapur (34½ miles) runs through picturesque wooded country. It is metalled, but is not in as good a state as the Hubli-Sirsi Road, owing to several streams with "Irish" bridges. Leaving Kodkanny, there is a steep ghat 2 miles from the Falls with a warning board for motorists. The Mysore frontier is crossed here, and the road improves. The travellers' bungalows at Jog, Talguppa, Sagar and Anantapur are picturesquely situated and well looked after. There are long stretches of level road where the pace can be increased and wide sweeps round wooded hill sides and small lakes until Anantapur (33 miles from the Falls) is reached. Here the dense bamboo jungle begins, the belt extending to within a few miles of Shimoga. The best route from Shimoga to Chitaldroog on the Poona-Bangalore road is via Benkipur over the Bhadra bridge to Channagiri and then through Holalkere (70 miles). Other routes to the Gersoppa Falls are from Byadgi Railway Station via Hirekeur and Shialkoppa, and from Harihar via Honnali and Shikarpur, but the Tungabadkra River unbridged must be crossed by the latter route. From Anantapur to Agumbe ghat on the Mangalore road is 53 miles, the laterite road running through beautiful avenues of *Dhoop* trees.

## OBJECTS OF INTEREST.

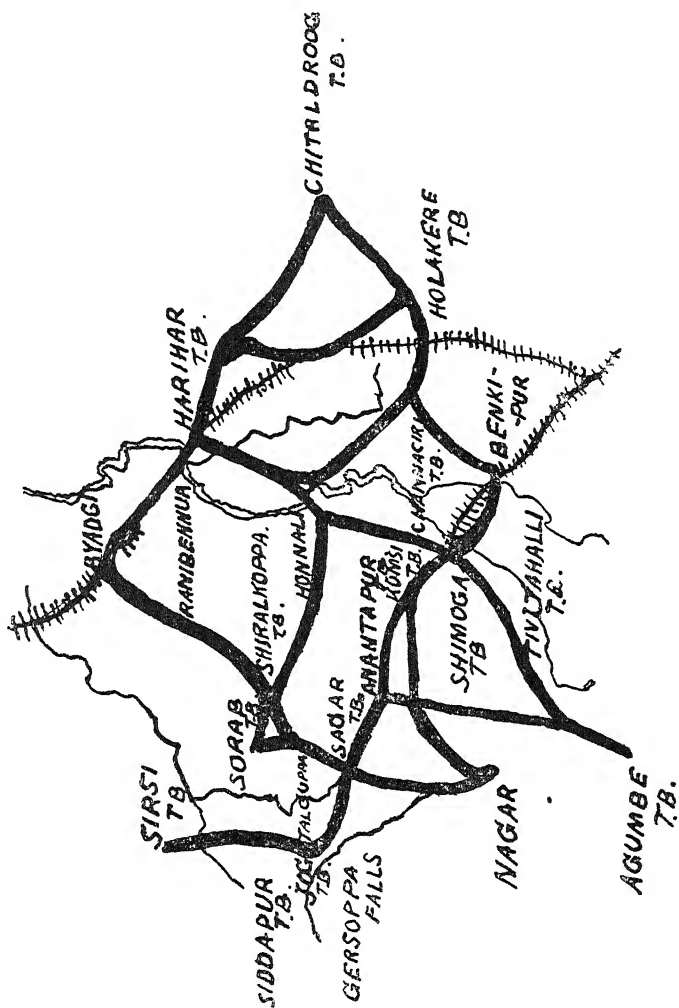
*Siddapur.*—Bilgi, 5 miles distant, contains ruined fort and palace. Lushington Falls near Unchali; 12 miles north west; very picturesque.

*Gersoppa Falls.*—Among the loftiest in the world, unsurpassed for grandeur and surrounding beauty. The main cataract, the "Rajah," has a sheer unbroken fall of 830 feet. Good shooting and fishing. Best view from Mysore bungalow across the gorge.

*Saiab.*—18 miles from Sagar, noted for excellent carved sandal wood ornaments.

*Nagar.*—20 miles from Sagar, former capital of Bednore kingdom. Old fort and other ruins. Captured by British in 1783 and retaken by Tippu Sultan. The lofty mountain of Kodachadri a few miles distant.

*Kumsi.*—Manganese mines of Workington Iron and Steel Company, the most important in South India.





SHIMOGA TO MANGALORE VIA AGUMBE PASS,  
118½ MILES, VIA KADUR AND BHOOND-  
GHAUT, 161 MILES.

Of the two routes, the latter is the more convenient, as there are no obstacles in the shape of unbridged streams. The Bangalore road is followed as far as Kadur (42½ miles), where the railway-line must be crossed and a south-west direction taken. Chikmagalur, the headquarters of the coffee-planting district, is 25 miles further along a fair metalled winding road, over two intermediate ghauts. The ascents are easy. Chikmagalur to Mudigeri (19 miles) through pretty undulating country, then to Charmadi down the Bhoondghaut a distance of 25 miles, gradient 1 in 15 to 1 in 20. This road has been much improved of late, but is rough and uneven in places, with one or two hairpin corners. From Charmadi to Mangalore (50 miles) the running is smooth and easy along a well-kept laterite road. By the direct route from Shimoga, Mangalore is reached via Agumbi ghat, 6 miles in length, gradient 1 in 17. There are two or three unbridged streams between Someshwar and Mangalore, which are swollen after heavy rain. Instead of descending into the low country from Agumbe, an easterly direction may be taken to Hariharpur (20 miles), at foot of the Koppa Ghât, then via Salebile and Balehonnur to Kotghar or Vastara, joining the Kadur Mangalore road. This is a very cool and picturesque run through coffee plantations, and the roads are metalled and bridged throughout. One or two fairly steep ghâts must be taken. Distances from Shimoga: Agumbe (54 miles), Hariharpur (74 miles), Balehonnur (94 miles), Vastara or Kotghar, ascending fairly steep hills (119 miles).

OBJECTS OF INTEREST.

*Sringiri*.—A few miles off Koppa Agumbe road, contains many Hindu and Jain temples.

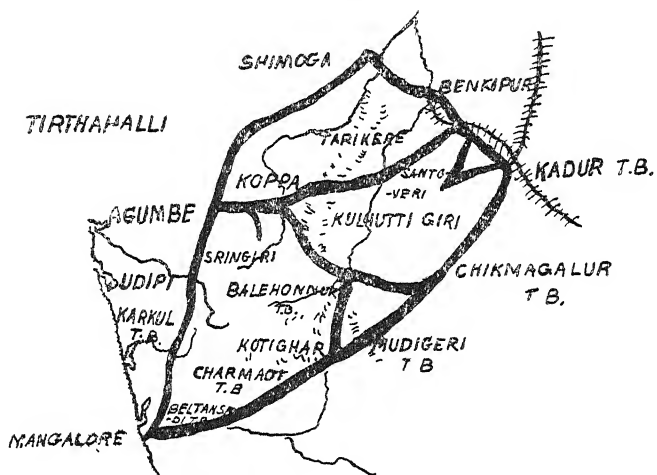
*Karkul*, between Shimoga and Mangalore, has a colossal stone statue of Goomta Raj (Buddha), 50 feet in height, standing on the top of a rounded hill. It is in perfect condition, though 1,000 years old.

*Beltangadi*, 37 miles from Mangalore, old hill fortress of Jamalabad, and Kudremukh Mountain, over 6,000 feet in height, a few miles north.

*Santarai*, 17 miles from Tarikeri, in Baba Boodan hills. Kuttigiri, over 6,000 feet high.

*Chikmagalur*, planters' club and stores, civil headquarters.

*Mangalore*, seaport and railway terminus. Noted Basel Mission, tile works, and cotton factories



# CHIKMAGALUR TO BANGALORE VIA HASSAN, 153 MILES.

Proceed in a south-east direction past the Fort and tank to Belur (14 miles), and then to Hassan (24 miles). Here the Arsikere-Saklaspur road is crossed. From Hassan proceed due east to Channarayana (23 miles), thence to Kunigal (48 miles), and on to Bangalore (44 miles). The road is metalled and bridged throughout, with no steep gradients. From Hassan to Mercara, in Coorg, is about 62 miles via Holenarsipur (20 miles), then due west. This is the only road which is bridged throughout. From Mercara to Mysore via Hunsur is about 80 miles.

Other Branch roads, distances :

Belur Mudigeri 20 miles	} All these routes run through picturesque, undulating country, cool and well-wooded in the west.
Belur Banavar R S via Kalebid 28 miles	
Tumkur Maddur via Kunigal 51 miles	
Hassan-Manjarabad Ft 28 miles	
„ Arsikere R.S. 27 miles	

## OBJECTS OF INTEREST.

*Belur*.—Celebrated temple of Chenna Kesava, 800 years old, richly and profusely carved in stone.

*Kalebid*, 11 miles from Belur, site of ancient Hindu capital of Hoysala kings, built in the eleventh century, and sacked by the Mahomedans a hundred years later. Large temple marvellously sculptured, is the finest specimen of Hindu architecture to be found. Jain Bastis containing polished black granite pillars.

*Sravana Belgola*, 8 miles from Hassan. Gigantic nude image of Buddha, 60 feet high, on a hill above the village. Jain inscriptions third century B.C.

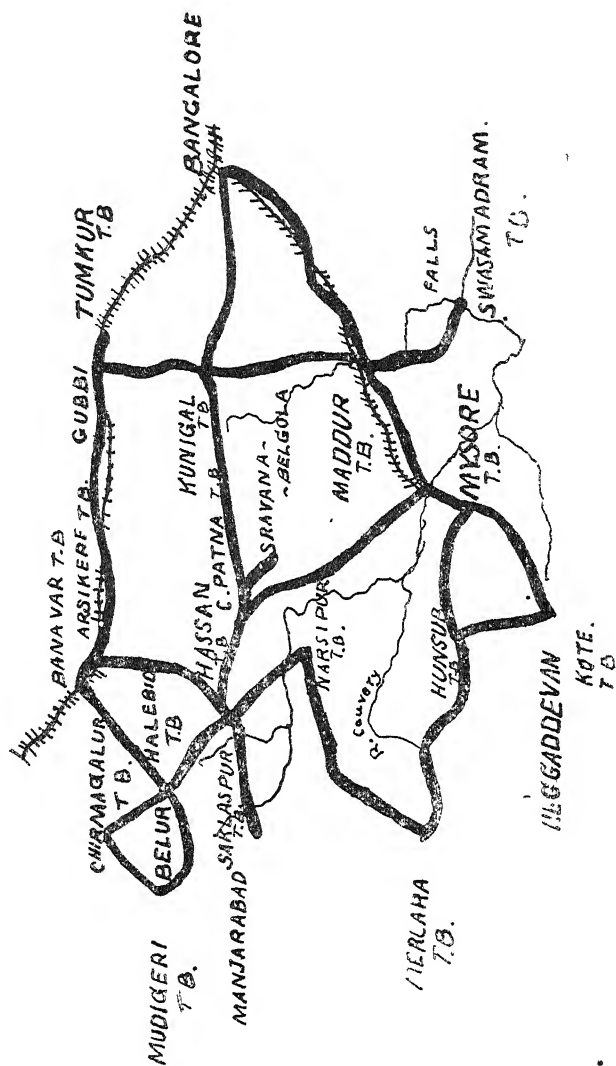
*Manjarabad*, old fort close to Saplaspur, where there is a club and stores.

*Mercara*, chief town in Coorg, and planting centre. Club and stores.

*Kunigal*, stud farm of Maharajah of Mysore.

*Canvery Falls*, near Swasamadrum, 30 miles from Maddur. The electricity generated by the power station here is carried to the Kolar Goldfields, 100 miles distant.

*Heggada Devankote*, 36 miles from Mysore. At Kakankote are the famous Kheddahs, where herds of wild elephants are captured and tamed.



## MADRAS TO BANGALORE ... 220 MILES.

Quite passable road, good in places, very much worn in others. Leaving Poonamallee and Superumbadur on the right, and proceeding cautiously to avoid the heavy cart traffic, the motorist soon reaches Ranipet. Here abstain from taking the direct road to Katpadi, which crosses the Pennair River—a most arduous undertaking for a car, as there is no bridge and much soft sand. Take the Arcot Road, and cross the Palar by the Wenlock Causeway, which is narrow, but not difficult to traverse. Proceed to Vellore, and recross the Palar to Katpadi (96 miles out by a fine bridge).

The road there runs north to Chittoor, but just 17 miles beyond Katpadi turn to the left, and avoid the town, thereby saving 3 or 4 miles. Sometimes the short cut, however, is in poor condition. The road, which now becomes more undulating, runs west to Palmaner, first climbing (1 in 15) the 5 miles of ghát, at the top of which there is a toll-bar, some 140 miles out from Madras. This is the Mysore Plateau, and the run to Bangalore through the Kolar Goldfields is good, straight, and easy. The road throughout is interesting, and much of the scenery is quite attractive, there being in places miles of superb shady avenues, in which monkeys abound. Irish bridges are plentiful.

## OBJECTS OF INTEREST.

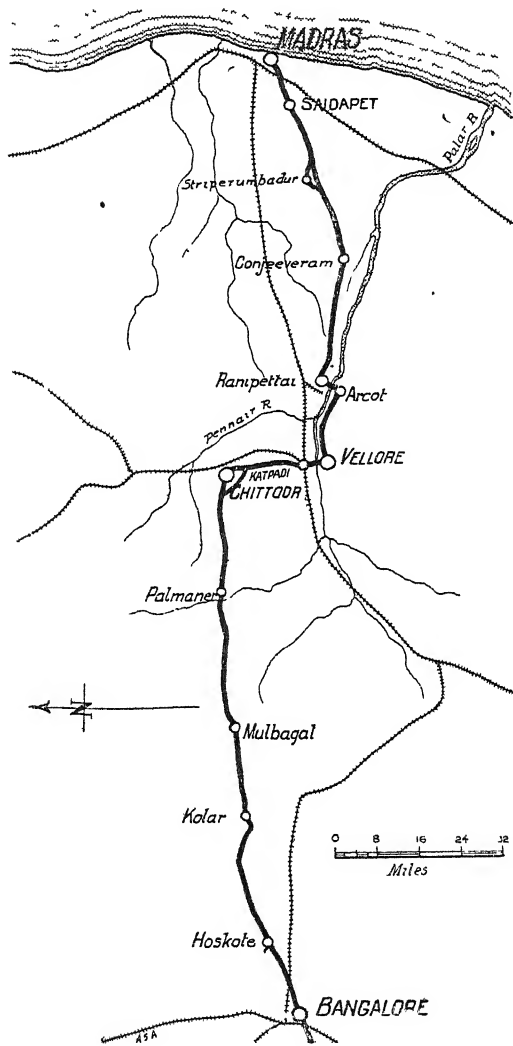
*Madras.*—Fort St. George imperishably associated with the British occupation of South India. St. Mary's Church, built in 1680, contains interesting relics. The Roman Catholic Cathedral at San Thomé, Chempauk Palace, High Court, and Museum. There is a magnificent marina stretching for miles along the surf-beaten beach. The boat club on the Adyar River is picturesquely situated.

*Vellore.*—Famous Shiva temple. Tombs of Tipu Sultan's family.

*Kolar Goldfields*—Largest mines in India, worked by eleven companies.

*Bangalore.*—The Fort. Maharajah's palace (open by special permission during the owner's absence).

*Arcot.*—Formerly the Carnatic capital. Clive first established his reputation by his famous capture from and defence of the town against the French and natives (1751).



( 195 )

## BANGALORE TO MYSORE AND OOTACAMUND, 194 MILES.

From Bangalore—a difficult town to leave—to Mysore (86 miles) the road is fairly good, but often ground into large ruts. At Hosapet (30 miles) there is a very sharp turn to the right, while 10 miles after Channapatna there is an awkward level-crossing. After leaving Mysore the road passes through Nanjangud, the head of the railway, and through Gundlupet—good rest-house—132 miles from Bangalore.

Then leave Gundlupet for Gudalur, which is just half-way between the former village and Ootacamund. The rivers are mostly bridged, and there are toll-bars. Climbing begins after Gudalur—about 1 in 20—and there are some difficult corners and “hairpin” curves. Reversing is necessary for cars with long wheel-bases. Few can, for instance, escape doing so at a very bad corner just before Paikara Bridge, 18 miles from Gudalur, and 12 from Ootacamund. Thereafter it is the rolling country for which Ootacamund is famous.

Motors are allowed to approach this hill-station, and sometimes are—at a cost of about £2 15s. for the entire journey—sent from Madras by train to Mettupalaiyam, the plain terminus of the mountain railway. Thence the motorist climbs 6,000 feet in 32 miles, of which 4 are level or down-hill. Gradients vary from about 1 in 12 to 1 in 30, the average being more or less 1 in 24. There are many “hairpin” corners, and the road is narrow, and often on the side of a hill, with possibly a precipice below. The scenery is, however, magnificent. There are four toll-bars, at each of which the charge is eight annas.

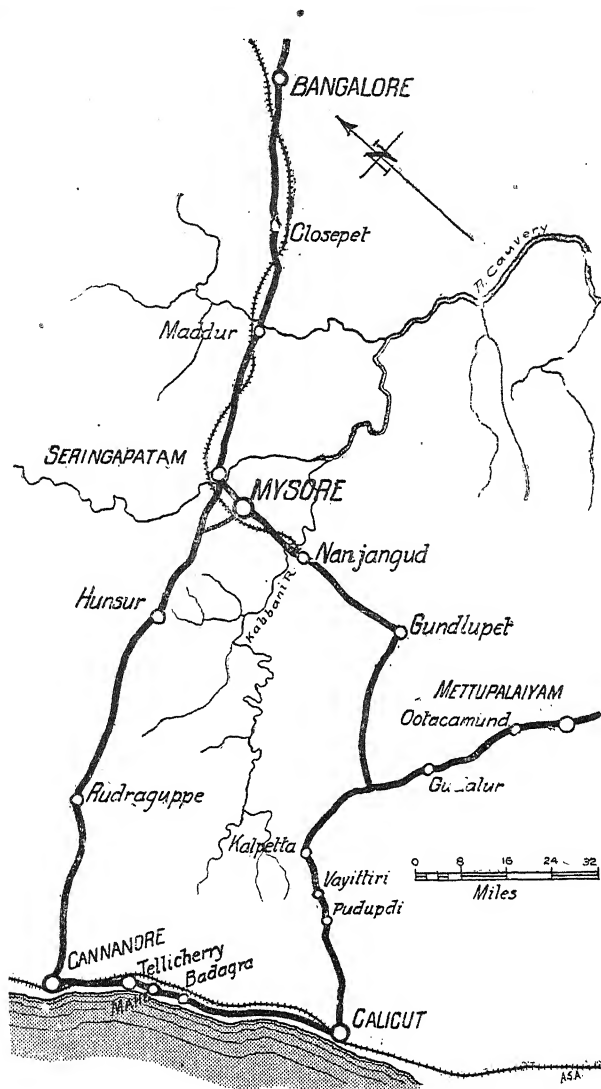
It is possible to go from Bangalore to Yercard (145 miles) by Hosur, Krishnagiri, Dharmapuri, Omalur, and Salem, but the road is very poor in places.

## OBJECTS OF INTEREST.

*Seringapatam.*—Tipu's fort; stormed in 1799 by the British. Very picturesque ruins. Tipu Sultan's tomb and summer palace.

*Mysore.*—Maharajah's Palace and Fort.

*Ootacamund.*—The famous hill-station of Southern India. Surrounding scenery is essentially European in appearance. The lake is 7,220 feet above sea-level. Motor-cars are allowed here.





## MYSORE TO CALICUT . . 129 MILES

An excellent motoring road. Take the Gudalur road from Gundlupet, but turn to the right instead of to the left about 25 miles out, and hence pass through Kalpetta, Vayittiri, and Tamracheri. Between the two latter places there is a climb of about 2,700 feet, with a gradient of 1 in 16, and some corners. The surface is rather uneven.

Northwards along the coast, from Calicut to Cannanore (60 miles) there is an excellent road, and it is possible to return to Mysore by Irikkur and Hunsur (distance 120 miles). This route is not so good as the other, but is quite traversable, being bridged throughout.

Pernambadi ghat,  $8\frac{1}{2}$  miles in length. Average gradient 1 in 18.

If the motorist wishes to go from Ootacamund to Calicut, he has merely to retrace his steps to just before Gudalur, and then take the road (mentioned above) to the left.

## OBJECTS OF INTEREST

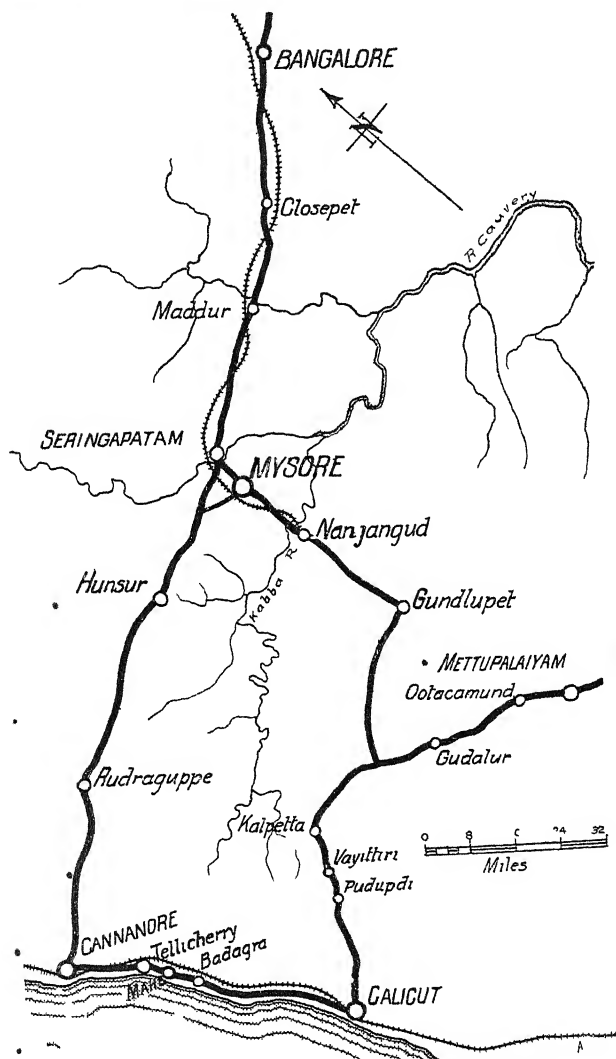
*Calicut* —Very quaint and picturesque old town, with memories of Vasco da Gama and the Portuguese.

*Cannanore* —Pleasant, healthy little town. Occupied by the Portuguese in 1505.

*Mahe* —The only French settlement on the west coast.

MAP OF MYSORE



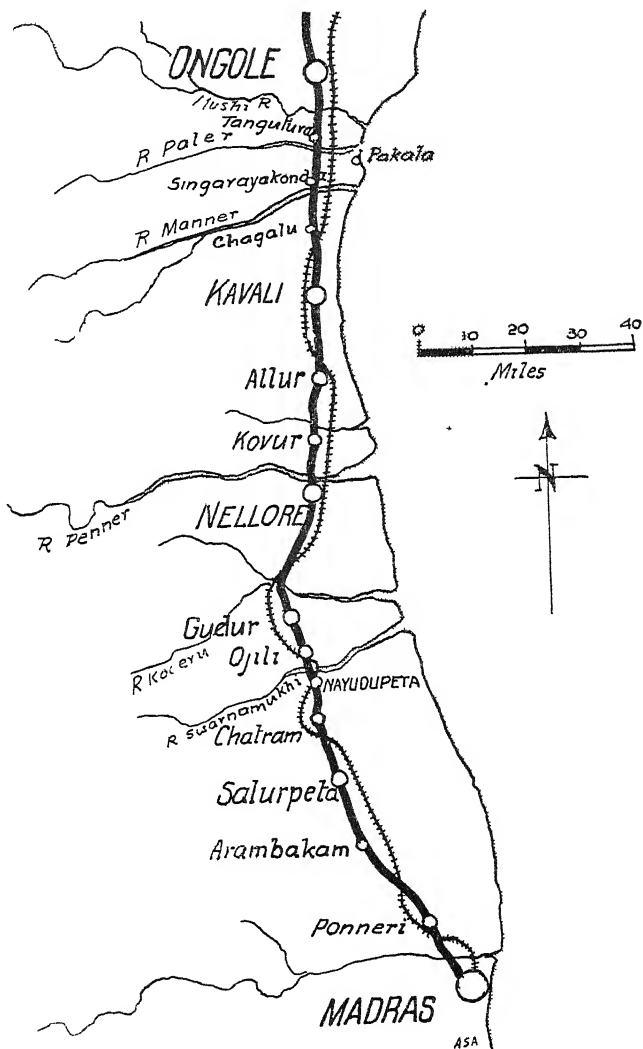


## MADRAS TO ONGOLE

182 MILES

Madras to Ongole is the first stage of one of the roads to Ilyder abad. It is fairly good throughout, quite level, and for the most part follows the railway and the coast. A few of the chief rivers are unbridged north of Nayudupeta, the chief being the Penner, Manrer, Paler, and Mushu. They can be crossed at any time, save during the heavy rains, when it is necessary to entain the car. There are no special objects of interest on this route, but it is hardly possible to cover the entire distance in one day. There are, however, good rest-houses along most of the distance, notably at Nellore, which is a little more than half way.

In places the road is somewhat uneven, and Irish bridges must be looked out for.



## ONGOLE TO HYDERABAD .. 212 MILES.

	<i>Miles</i>
Ongole to Dachepalle ...	86
Dachepalle to Haitipamla ...	55
Haitipamla to Hyderabad ...	71
Total . . .	212

A fairly good road, level nearly throughout the whole distance. There are fewer rivers, but little bridging, and the Kistna River at Pondugal must be crossed by ferry with considerable care. There is little accommodation on the route, and it is necessary to have petrol everywhere sent ahead.

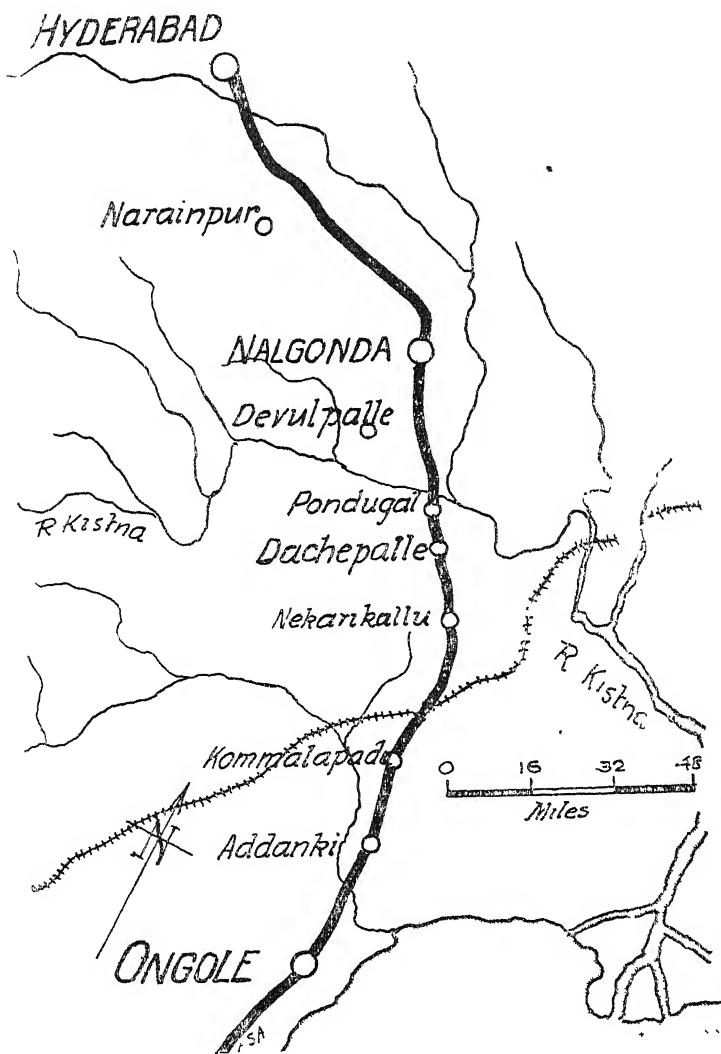
Other roads in *Hyderabad State*, with distances are :

	<i>Miles.</i>
Hyderabad to Pulara (Nagpur Road), partly bridged	195
Hyderabad to Jalna, fair-weather road, via Bidar, Udgeri, and Gangakher . . .	265
Hyderabad to Sholapur, via Homnabad and Naldurg, bridged, main road to Poona ...	180
Hyderabad to Kurnool, passable at all seasons ...	136
Hyderabad to Bellary; via Raichur . . .	158
Aurungabad to Jalna . . .	39

## OBJECTS OF INTEREST.

*Hyderabad.*—The capital of the Nizam's territory. Extremely picturesque bazaars. The Nizam's palace, which can be visited by permission obtained through the Resident. Near Hyderabad are the ruins of Golkonda, the capital of the third great Moslem dynasty of the Deccan.

*Secunderabad.*—Very large British military cantonment. Husan Agar Lake, constructed in the sixteenth century.



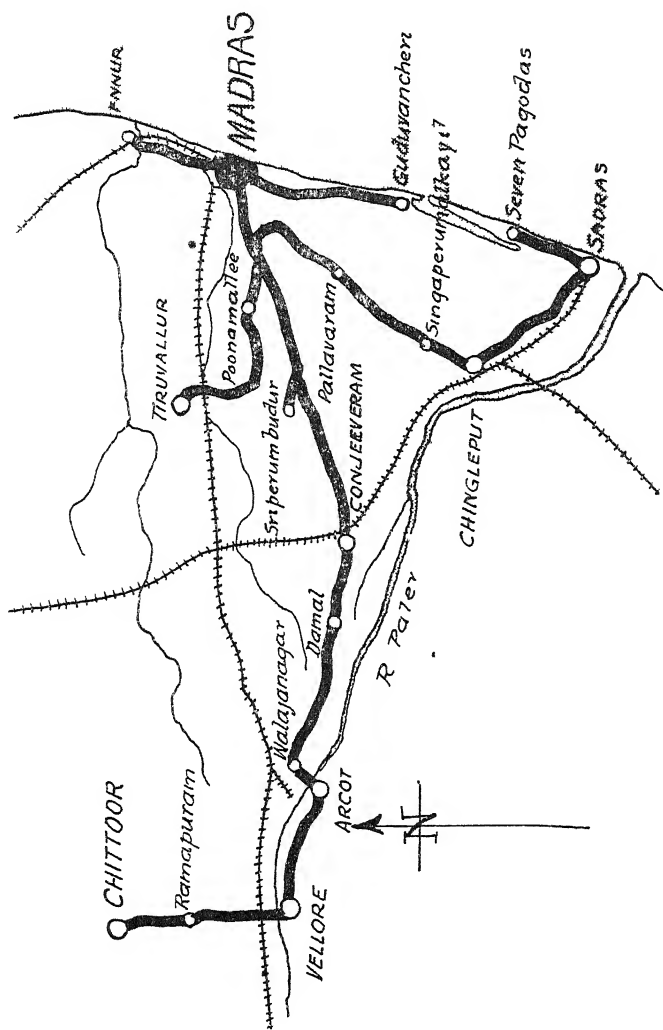


### MADRAS AND ITS ENVIRONS

Madras is a city of magnificent distances, with broad streets stretching for miles. There are excellent drives along the coast.

At least two or three days may be spent in excursions in the suburbs, the most popular being to Chingleput to the south—a town which played an important part during the contest between the French and English in the eighteenth century—and to the Seven Pagodas at Mahabalipuram, also to the south on the coast. These pagodas are some of the most remarkable structures in India, dating from the seventh century, and all connected with the Hindoo religion. They contain wonderful carving. A third trip is to Conjeeveram, by way of Srirumbudur. Conjeeveram is the Benares of Southern India, one of the seven sacred cities, with remarkable temples and a well known festival, which takes place in May. At Tiruvallur there is a very interesting Dravidian temple, with a curious architectural design and much wealth of detail.

Each of these trips can be done in one day, being within a radius of 30 to 40 miles.



## KURNOOL TO CHITTOOR

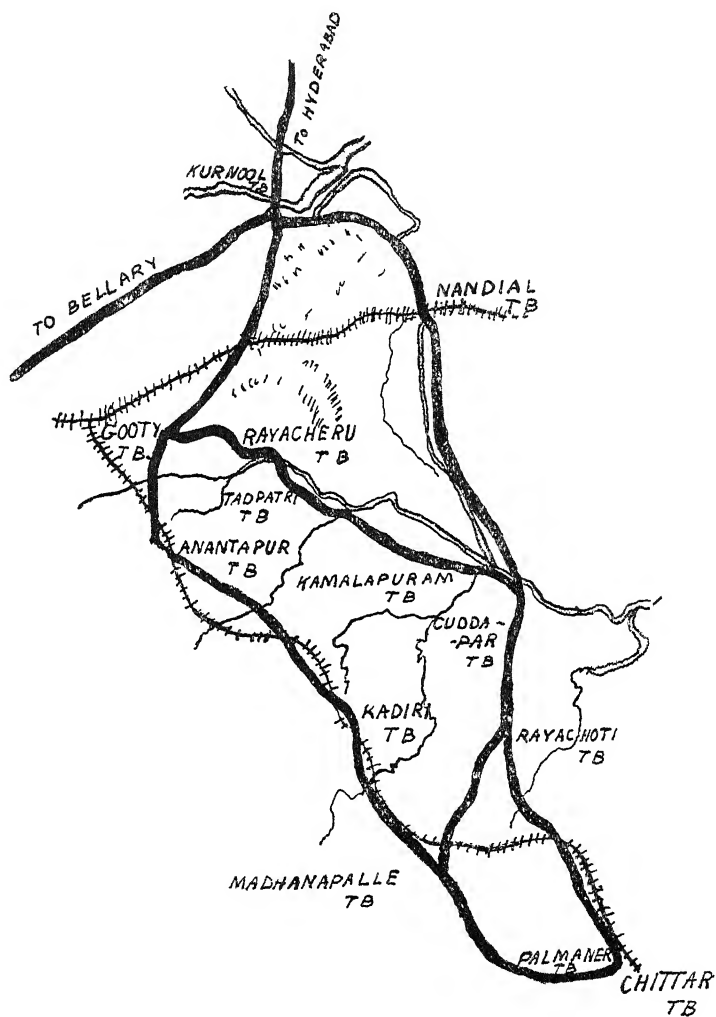
253 MILES

Kurnool is a town on the banks of the Tungabhadra River, on the Bellary Hyderabad road, 92 miles from the former place. The roads to and from Kurnool are intersected by unbridged streams, but are metalled and fairly level. From Kurnool to Anantapur, via Gooty, is 90 miles, and the direction is then south east to Chittoor, joining the Bangalore Madras road at Palmaner. There is another route via Cuddapar (123 miles from Kurnool), along a partly bridged road, the distance to Chittoor being 226½ miles. The Pennaru, a large stream, has to be forded and there is a ghat at Timarajpalli, 26 miles from Kurnool.

## DISTANCES

	<i>Mile</i>
Cuddapar to Rayachoti	33½
Rayachoti to Chittoor	70
Gooty to Cuddapar	98
Rayachoti to Madhanapalle	44½

The district of Kurnool is well irrigated, and a main canal connects the town with Cuddapar. Along with Bellary and Anantapur, it is within the famine zone of the Madras Presidency but has more forest than those districts. Good fishing and shooting can be had. From Kurnool to Hyderabad (127 miles) a partially metalled road runs, but the Tungabhadra and Kistna Rivers must be forded.



BANGALORE TO COIMBATORE, VIA SALEM,  
206 MILES.

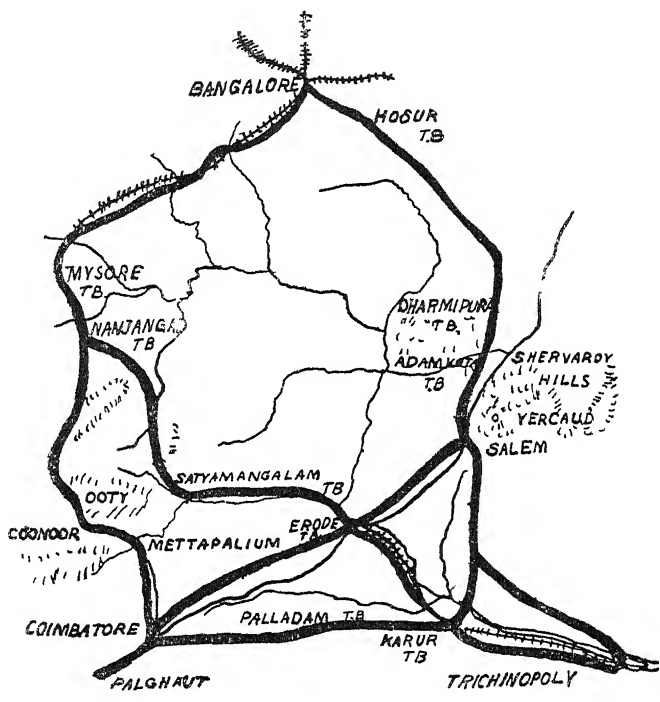
This is one of the two main routes southward from the Mysore Province. The road lies, via Hosur (27 miles), into the low jungle country. The Topur Hill beyond Adamankota, where the Madras Road is joined, is steep, the gradient being 1 in 10 in some places. The towns of Salem (107 miles) Erode (145 miles), are skirted, the Cauvery River being crossed by a bridge. From Erode to Coimbatore—a fair run of 61 miles along the metalled road, the only obstacle being the unbridged Waratangiri stream, about 25 miles from Coimbatore.

One of the routes from Mysore city is shown on p. 172. The other proceeds, via Nauyangud and the Hassanur Ghat, to Erode—a distance of 120 miles. The ghat is 6 miles in length, but not steep. There are several unbridged nullahs. From Erode to Karur is 40 miles, and Salem to Kara 52½ miles, crossing two unbridged streams. Bangalore to Trichinopoly, via Kara, is 205 miles.

OBJECTS OF INTEREST

*Yercaud*—A sanatorium in the Shevaroy Hills, about 12 miles from Salem Railway Station. Numerous coffee plantations.

*Coimbatore*—Civil Station. Temple of Perur, 3 miles distant, with stone carvings.



### CALICUT TO TRICHINOPOLY, VIA COIMBATORE, 250 MILES.

From Calicut there are several roads through the hills to Palghaut (90 miles). The rivers at Beypore, Patambi, and Ponani, are not bridged, but can be crossed by large ferries. Palghaut to Coimbatore, 31 miles. Country jungly near Walunjor. The road from Coimbatore to Trichinopoly (127 miles) is well made and bridged, except at the Amravati River 330 yards wide, between Manavai and Karur. There is also another route from Palghaut via Palni and Dindigul to Trichinopoly (166 miles), crossing several unbridged streams.

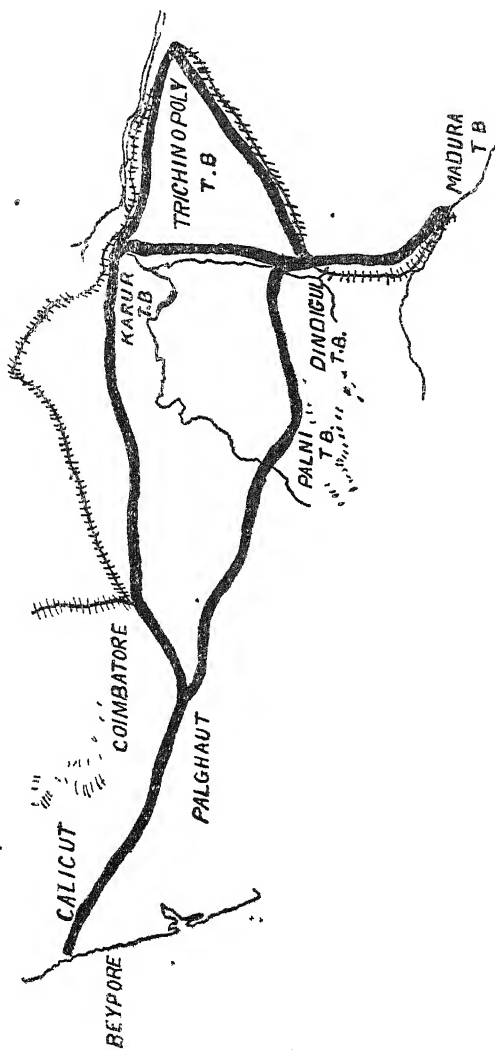
#### DISANCES

	<i>Miles</i>
Palghaut to Palni	70
Palni to Dindigul (descending hill 1 in 18)	35
Dindigul to Karur	49

#### OBJECTS OF INTEREST

*Dindigul*—Strongly fortified hill taken by the British in 1781. Considerable cigar factories.

*Trichinopoly*—Town and Rock. Scene of early exploits of Clive. Temple of Sri Rangan, with grand gateway.





MADRAS TO TANJORE, VIA TRICHINOPOLY,  
237 MILES.

After Chingleput the road lies in a south-west direction, through flat country intersected by rivers. The unbridged rivers are the Palar, Pennar, Mallatur, Guelalam, Magor, and Vellar. The Coleroon and Cauvery are bridged near Trichinopoly (200 miles)

## DISTANCES

	<i>Miles</i>
Madras to Chingleput	35
Madras to Villupuram	100

From Trichy to Tanjore (37 miles) the road is metalled and bridged, except at one stream. Floods on these rivers may occasionally interrupt traffic for a day or two at a time, but the road may be said to be practicable at all seasons.

## OBJECTS OF INTEREST

*Wandiwash*.—Thirty miles south west of Chingleput, where Eyre Coote defeated Lally in 1759, and overthrew the French regime in India

*Gingee*.—South of Wandiwash. Famous Carnatic hill fortress, and pagodas

*Pondicherry*.—Seaport off the main route, and 110 miles south of Madras; is the French capital in the East Indies, taken by the British in 1778, and restored to France. Contains pillars brought from Gingee by Duplex.

*Fort St David*.—Near Cuddalore; is in ruins. About 25 miles off main route

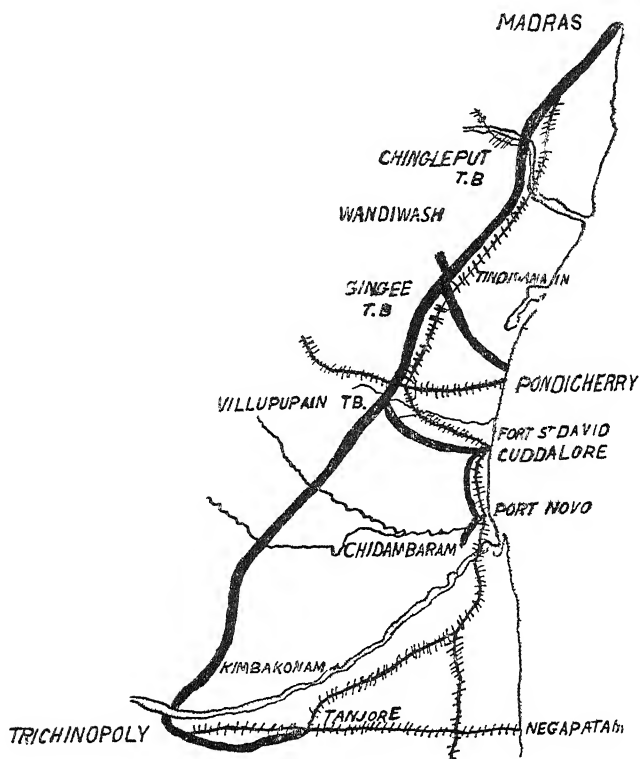
*Porto Novo*.—A few miles south. Scene of decisive victory of Sir Eyre Coote over Haidar Ali in 1781.

*Chidambaram*.—Ancient Hindu capital. Hall of 1,000 pillars and elegant temples

*Tanjore*.—Great pagoda, with beautifully carved shrine, fort, and large palace.

*Kumbakonam*.—Twenty-three miles from Tanjore, with large pagoda

*Negapatam*.—Seaport and railway terminus.



TRICHINOPOLY—MADURA—TUTICORIN,  
208 MILES.

The road is metalled and bridged, except at Vaigai River, near Madura, where there is a causeway (81 miles), the Kanniseri River (120 miles), and the Tambraparni River, between Palamcotta and Tuticorin. The country is open, flat, and cultivated, for the most part. Madura may also be reached via Dindigul (101 miles), but this is a rougher road. Madura to Ramnad (68 miles), bridged except the Vaigai River, near Pudukota. Madura to Palamcottah (95 miles).

OBJECTS OF INTEREST.

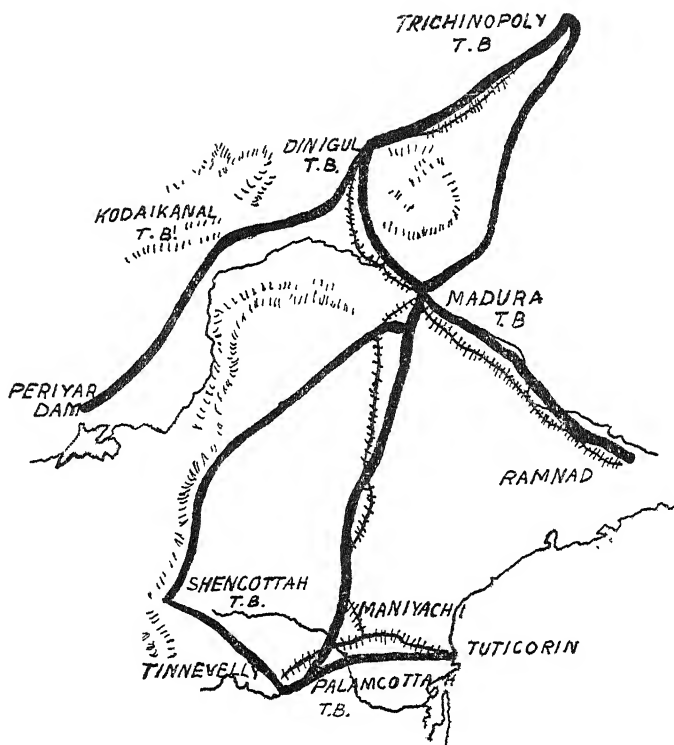
*Madura.*—Great temple, 150 feet high, with statues, jewels, and hall of 1,000 pillars elaborately carved. Tiiumala's Choultry and Palace.

*Rameswaram.*—Temple on an island,  $37\frac{1}{2}$  miles from Ramnad. Fine example of Dravidian style of architecture, extensive corridors, and richly-sculptured pillars. The projected railway to Ceylon will cross the Pambam passage on the south side of the island.

*Tinnevely.*—Headquarters of district, and great mission centre. Temple worth seeing

*Tuticorin.*—Railway terminus and important seaport. Daily service to Colombo by steamer. Pearl fisheries worked periodically.

*Kodai Kanal*, in the Palni Hills, west of Dindigul hill-station, 7,200 feet in height, and is fast gaining popularity.



# DINDIGUL — MADURA TRIVANDRUM, 202 MILES, VIA SHENKOTTA.

After following Dindigul-Madura Road (40 miles, mentioned on last page) in southerly direction, the route changes to south-west, and several unbridged streams are encountered. Vaigai River crossed by stone causeway.

Distances of stages from Madura : Tirumangulam, 12½ miles ; Kalpat'i, 24½ miles ; Satur, 47½ miles ; Shenkotta, 95 ; Trivandrum 162 miles

The road, after gradually ascending the Ghaut, descends into the Travancore State, and is metalled and bridged as far as Trivandrum. From Trivandrum to Palamcotta, via Arambali, is 90 miles, along a good metalled and bridged road. There is a large iron-girder bridge over the Tamraparni river, and travellers' bungalows at intervals of about 12 miles.

Quilom to Shencotta branch-road (60 miles) runs through broken and rugged country along the railway-line, and is quite practicable.

From Dindigul a road leads to Kotayam, in North Travancore (150 miles), skirting the foot of the Palni hills. This is bridged, except at the Periyar River. Between Kottayam and Trivandrum, by road running north to south (96½ miles), there are three unbridged rivers with ferries.

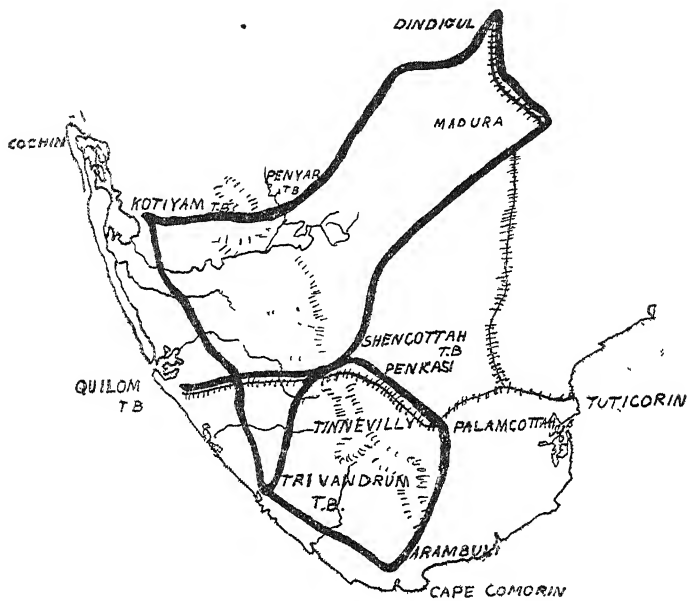
## OBJECTS OF INTEREST.

*Trivandrum*, capital of the state. Maharajah's palace, ancient Temple and Choultry.

*Quilom*.—Seaport mentioned by Marco Polo. One of the chief seats of the St. Thomas early Christians.

*Cape Comorin*, the southernmost point of India, a famous place of pilgrimage.

*Anamudi Peak*, north-east of Kotayam, 8,837 feet, is the highest mountain in South India.



## THE UNITED PROVINCES

The appended map gives the whole of the first class main roads in the United Provinces which may be recommended for motorists. They do not include *all* the metalled roads, so that the traveller has much choice over and above those given here. Perhaps the excursion which may be most strongly recommended is to Naini Tal (6410 feet), the picturesque and favourite hill station of the local Government. It may not have the attractiveness of the other hill stations, but the lake is very striking and there are some good mountain views. Naini Tal was the scene of the disastrous landslide in 1880.

It is possible to make some good excursions from here, along roads which are quite fit for motoring. Thus, there is a good surface from Naini Tal to Raniket (30 miles) by way of Khyrna (D B) to which place it is 12 miles. There is about here as up to Naini Tal from the plain, some stiff climbing, but nothing which need deter the expert motorist.

Dehra Dun too, is an interesting little town picturesquely situated in a mountain valley about 2300 feet above the level of the sea and a summer resort of many Europeans. It is quite accessible to a motor car, but it is not possible to continue the journey from Rájpur to the hill stations of Mussooree as the road is too steep and narrow.

It should finally be pointed out that, while the Bareilly district is hardly so interesting as other parts, it offers an agreeable alternative route to a tourist spending some time in the United Provinces. The military stations are numerous and a cordial welcome is ever ready for those provided with letters of introduction.

ROAD MAP OF THE UNITED PROVINCES.



## Calcutta to Assam

FOLLOW the Darjeeling Road to Dinajpur, and there turn to the right for Rangpur.

The road, which is fairly good throughout and level, crosses the Eastern Bengal Railway (northern section) at Parbatipur, and follows the Eastern Bengal (southern section) to Kaunia. There is a ferry from Kaunia over the Tista River to Tista Junction. A little beyond here the road crosses and leaves the line, and runs straight across country to Dhubri, on the Brahmaputra River. The Assam Trunk Road begins here, or rather on the opposite bank at Fakirganj. This is generally a good road, level for the most part at first, but rapidly becoming hilly, with, in places, marvellous roadside vegetation. Portions of the road are bridged throughout as follows:

	<i>Miles.</i>		<i>Miles.</i>
Dibrugarh Subdivision	... 12	Jhanzi to Dehing ...	37½
Sadiya	.. 2	Dehing to Dibrugarh	... 20
Sibsagar	.. 1½	Dibrugarh to Lahowal	.. 6
Jorhat	.. 1½	Lahowal to Sadiya	.. 59
Nowgong Town	... 4	Topatoli to Jakhlabanda	50
Kakodanga to Jhanzi	.. 30½		

It should be expressly pointed out that *dāk* bungalows, at which there are khansamahs who cater for travellers as required by the latter, exist at (almost) all *Sadr*—*i.e.*, district headquarters stations—and also at subdivisional stations, besides which official inspection bungalows (which may be occupied by travellers with permission and on payment) exist at convenient distances of about 12 or 15 miles along all the roads of any importance. But at the latter bungalows, while there is furniture and equipment, travellers are obliged to

cater for themselves. Full official details are given below.

### NIGRI TING TO MANIPUR—205 MILES.

There are two routes from Nigri Ting to Manipur, as follows:

	<i>Miles.</i>		<i>Miles.</i>
Golaghat .. ..	18	Golaghat ... ..	18
Naojan ... ..	33	Wokka ... ..	53
Dimapur ... ..	24	Kohima ... ..	48
Kohima ... ..	43	Manipur ... ..	87
Manipur .. ..	87		<hr/>
	<hr/>		206
	205		

The Dimapur is the better, as the road is wider, and better bridged. Neither is metalled, and the surface breaks up very easily, with the result that in wet weather motoring is impossible. Large portions of each road are through dense jungle, and there is a good deal of climbing, since Manipur is 2,500 feet above sea-level. The alternative road from Silchar to Manipur (127 miles) is often a mere jungle track, and cannot be traversed by motor-cars at any time. Dāk bungalows exist at the chief places.

### GAUHATI TO SHILLONG—63½ MILES.

This is a good cart road through pleasant vegetation, with a stiff climb to Shillong (4,900 feet) from Borpani (54 miles). There is an excellent half-way bungalow at Nangpoh. It is 33 miles farther on from Shillong to Jowai, 28 more to Jaintapur, and 26 more to Sylhet (total 87). From Sylhet to Silchar it is 66¾ miles. The scenery is very picturesque and the climate delightful, but the road is often narrow and rough, and liable to be cut up by land disturbance. Shillong is the summer headquarters of the Assam Government.

## THE ASSAM TRUNK ROAD.

Name of Stage.	Length Stage.	Total Distance from Dhubri	Remarks.
	Miles.	Miles.	
Dhubri . . .	...	...	Sadr station. A steam ferry twice daily between Dhubri and the opposite bank near Fakirganj, at which place the Assam Trunk Road commences. Circuit-house, dak bungalow, and <i>serais</i> for the use of officials and travellers; also a post office and telegraph office.
Fakirganj . . .	5½	5½	An important village with post office, inspection bungalow, and <i>serais</i> . Ordinary bazaar supplies available from shops as well as from <i>hit</i> , which is held weekly. The distance from the steamer-ghat to Fakirganj varies from 1 to 4 miles according to the state of the river and channels.
Langrabhita . .	9	14½	An inspection bungalow and subordinates' quarters; good drinking-water from well in compound. Bazaar supplies obtainable from Jenarabhat, 2¼ miles down the road, where there is a post office. A <i>serai</i> on the left bank of the Gara River, over which a bridge is being built.
Lakhipur . . .	10½	24½	Post and telegraph office, dispensary, inspection bungalow, and police thana. Water good from well in compound of inspection bungalow. Ordinary bazaar supplies available.
Baida . . .	9½	34	Inspection bungalow and <i>serai</i> . Scanty bazaar supplies obtainable. Water unwholesome.
Agia . . .	10½	44½	Inspection bungalow, <i>serai</i> , and post office. Scanty bazaar supplies obtainable. A Local Board road branches off here for Goalpara, which is 9 miles off, where there is a large bazaar and a telegraph office. Drinking-water unwholesome.
Krishnai . . .	8½	52½	Inspection bungalow, <i>serai</i> , dispensary, and post office. Scanty bazaar supplies obtainable from shops and weekly <i>hit</i> .
Durangiri . .	13½	66½	Inspection bungalow, dispensary, and <i>serai</i> a mile farther on. Water from well in front of bungalow good. The Dudnai River is crossed in the 66th mile, in which mile roads branch off in opposite directions for Damra and Dolgoma. Police outpost at junction of these roads.
Dhupdara . . .	11½	77½	Inspection bungalow and <i>serai</i> . Scanty bazaar supplies obtainable from petty shops and a weekly <i>hit</i> . A road in 59th mile branches off for Goalpara, which is 25 miles off.

Singra River ...	6	...	This is a hill stream, over which there is an iron bridge. There is a letter-box on the roadside, and a <i>hāt</i> is held in the neighbourhood every Wednesday. There are a few shops and a <i>serai</i> near the outpost. The river water is good for drinking purposes, and is obtainable throughout the year.
Boko ...	12	90	Good water to be had here, also food-grains in small quantities. <i>Hāt</i> held every Saturday in vicinity. Inspection bungalow, <i>serai</i> , and tahsil cutcherry, a post and money-order office, and a police outpost.
Chaugraon ...	11	101	Inspection bungalow on the banks of the Kulsi <i>nadi</i> , which is bridged. Plenty of good water and food. <i>Serai</i> , police thana, and a post and money-order office, and dispensary. <i>Hāt</i> held every Sunday and Thursday.
Palasbari ...	11½	112½	Police outpost, inspection bungalow, post and telegraph office, tahsil, cutcherry and dispensary. Up and down mail steamers call at the ghat near post office daily. Good drinking-water and food obtainable. <i>Hāt</i> held every Tuesday and Saturday.
Khanamukh ...	14½	...	This is a halting-place on the bank of a small stream. Water not very good. <i>Serai</i> and a shop here. A <i>hāt</i> is held at Dhuptolla, ¾ mile from here, every Sunday and Wednesday.
GAUHATI Amrigogue	14½	127 136	Sadr station. Inspection bungalow. Drinking-water from nearest stream all the year round, but very bad during rains. No shop or village, no supplies procurable.
Sonapur	10	146	On the bank of the Digru River, crossed by a substantial iron girder bridge. Plenty of good water. Shop for sale of native provisions. <i>Hāt</i> held every eighth day. Inspection bungalow, <i>serai</i> , dispensary, and a combined post, money order, and telegraph office near the river.
Nokhla	14½	167½	Inspection bungalow, subordinates' staging hut, police thana, post and money-order office, dispensary, and <i>serai</i> ; water from a <i>phucca</i> well; supplies from shops close by, also from villages; <i>hāt</i> held every Sunday. Nearest telegraph office at Jagi Road railway-station, ½ mile from the inspection bungalow. An alternative route to Nowgong branches off from the Assam Trunk Road here. This is called the Jagi Road, by which Nowgong is only 37 miles, having only two ferries, at Bhakatgaon and Nowgong respectively, whereas the Assam Trunk Road has four ferries. Nowgong district begins at Topatoli, 1½ miles west of the inspection bungalow.

## THE ASSAM TRUNK ROAD—Continued.

Name of Stage	Length of Stage		Total Distance from Dibrui	Remarks
	Miles	Miles		
Amilghat	5 $\frac{1}{2}$	166		Ferry crossing of the Killing River, which remains navigable throughout the year. Subordinates' staging hut, post and money order office, also telegraph office. Water from a <i>pucca</i> well, supplies from shops <i>hât</i> held every Monday, a large tea garden close by. Inspection bungalow, subordinates' staging hut, post and money order office, and <i>seiat</i> . Water from River Kopili not bad. Supplies from villages and shops, <i>hât</i> held at Khola 2 miles off, every Tuesday. Nearest telegraph office at Dharamtul railway station, 2 miles off. River Kopili is crossed by a ferry <i>mar</i> . This river is never fordable. Inspection bungalow, subordinates' staging hut, thana, <i>seiat</i> , post and money order office, also telegraph office, tahsil office, and dispensary, all on the east bank of the Kallang River. Water from a <i>pucca</i> well, also from River Kallang, supplies from daily bazaars and shops, <i>hât</i> held every Monday. The river water gets bad in the cold weather. Nearest railway station is Chapparmukh, 2 $\frac{1}{2}$ miles from the inspection bungalow. River Kallang is crossed by a ferry <i>mar</i> during the rains. The post and telegraph office, also tahsil office, are close to the inspection bungalow. The Kallang gets fordable in the cold weather, and is then crossed by a bamboo bridge. Sadr station of Nowgong district and headquarters of Nowgong Public Works subdivision. Circuit house, dak bungalow, and two <i>seiat</i> . Water from River Kallang and from well, and supplies from daily bazaars and shops. Post office, money order office, telegraph office, charitable dispensary, and police thana. River Kallang is crossed by a ferry <i>mar</i> in the rains and by a temporary bridge in the cold weather. The nearest steamer station is Sulghat 32 $\frac{1}{2}$ miles off, and the nearest railway station is Chapparmukh, 16 $\frac{1}{2}$ miles, via Roha. Tezpur, by Laokhoa Road, is 24 miles distant. On this road the Brahmaputra has to be crossed by a ferry <i>mar</i> . Although Tezpur is nearer to Nowgong than Sulghat, yet the latter is the convenient steamer ghat for Nowgong.
Nelli	3	169		
Dharamtul	6 $\frac{1}{2}$	175 $\frac{1}{2}$		
Roha	12 $\frac{1}{2}$	188 $\frac{1}{2}$		
Nowgong	13 $\frac{1}{2}$	201 $\frac{1}{2}$		

Purainigudam	74	209 <sup>1</sup>	Inspection bungalow and <i>serai</i> , water from River Kallang, supplies from daily bazars and shops, post and money order office, a large Moham median village, and a charitable dispensary, $\frac{3}{4}$ mile off from the inspection bungalow
Samaguri	(54	215	A large village, post and money order office, police thana, and weekly <i>hat</i> held every Sunday. Water from River Kallang, and supplies from daily shops. Tahsil cutcherry about $\frac{1}{2}$ mile off towards Nowgong. The weekly <i>hat</i> is held about 1 mile away towards Silghat
Pangagora	(21	217 <sup>1</sup>	Inspection bungalow, subordinates' staging hut, and <i>serai</i> . Water from River Kallang and supplies from shops and villages
Mecra	(51	223	Subordinates' staging hut on roadside, water from wells, supplies from shops. <i>Hat</i> held every Sunday. Post and money order office and telegraph office. A large tea garden close by
Kuaritol	(6	229	Inspection bungalow, police outpost and <i>ind flakant</i> in the dry season and supplies from villages and shops. Post, money order, and telegraph office, also steamer ghat at Silghat, 4 $\frac{1}{2}$ miles distant by Silghat Kauritol branch road, on which the Kallang River (fordable in the cold weather) is crossed by a ferry in the rains. The River Kallang is in front of the inspection bungalow. There is a charitable dispensary in Silghat, also an inspection bungalow
Jaklabandha	(41	234 <sup>1</sup>	Subordinates' staging hut water from River Kallang, supplies from villages and shops, <i>hat</i> held every Sunday. Telegraph office and steamer ghat at Silghat, 5 $\frac{1}{2}$ miles distant. Post and money order office here. Branch road to Silghat (4 $\frac{1}{2}$ miles) on which River Kallang is crossed by a ferry <i>mar</i> in the rains and is fordable in the cold weather. This ferry crossing is about a mile off
Amguri	(51	239	Inspection bungalow, subordinates' staging hut and <i>serai</i> . Water from a hill stream. Amguri tea garden close by, but the manager does not live here. Supplies from villages
Palkhai	(51	244 <sup>1</sup>	Tea garden and a few shops
Deopani	(31	248	Ferry crossing throughout the year, but in the cold weather a bamboo bridge is generally erected to carry the traffic
Kuturi	(15	251	A police outpost. No good water available. Scanty supplies from the village. Tea garden about 3 miles off
Bagori	(31	254	Inspection bungalow, subordinates' staging hut, and <i>serai</i> . Water from Dehing River close by, and supplies from shops, also from villages

## THE ASSAM TRUNK ROAD—Continued

Name of Stage	Length of Stage		Total Distance from Dhubri	Miles	Remarks
	Miles	Miles			
Kaziranga	11		265		The Dehing River $\frac{3}{4}$ mile off is the boundary between Nowgong and Sibsagar districts. The river is bridged. There is an inspection bungalow and a <i>sevat</i> . Drinking water is obtainable from the Dehing River close to the inspection bungalow. The nearest post office is at Kaziranga close to the bungalow and the nearest telegraph office is at Bokai hat 10 miles off. Supplies from village scanty.
Bokaihat	10		275		There is an inspection bungalow a <i>sevat</i> a police outpost a combined post and telegraph office and a shop for country provisions. The nearest steamer station is Dhansumukh 7 miles off by a cold weather road. The River Diphoo 2 miles west of Bokaihat is crossed in the rains by a ferry <i>mun</i> and is fordable in cold weather. Good drinking water is obtainable from a well near the inspection bungalow.
Kamargaoon	10 $\frac{1}{2}$ by bullock load		285		There is an inspection bungalow a <i>sevat</i> and a police outpost. The nearest post and telegraph office is Numalgarth 2 miles off. Drinking water is obtainable from a well close to the inspection bungalow and from the Dhansu. The Dhansu River 2 miles west of Kamargaoon which is not fordable is crossed by a self-acting ferry of iron boats. There is a shop for country provisions at Kamargaoon and several at Numalgarth. Village supplies scanty. Steamer station Dhansumukh 18 miles or Shikarighat 17 miles in cold weather. Nighting 18 miles in rains.
Badlipai	7		292		There is an inspection bungalow and a combined post and telegraph office. Country provisions available from a shop. Water is scarce. The nearest steamer station is Shikarighat 10 miles.
Dergaon	8		300		There is an inspection bungalow a <i>sevat</i> and a post office. Water is obtainable from a tank near the inspection bungalow. Country provisions from shops and a large village. Nearest steamer station is Shikarighat in the cold weather, 3 miles and Nighting in rains 4 miles.

Kakoda ga	5	305	Nearest post office is Deigron 1 mile off. The nearest telegraph office is at Nisrting 4 miles off. There is an inspection bungalow obtained from private wells of a tea garden 1 mile off. Nearest post office is Shiklani distant 1 mile. The nearest steamer station and telegraph office is at Nisrting 5 miles.
JORHAI	11	316	Subdivisional civil station circuit house, dak bungalow, inspection bungalow, waterable dispensary railway station, post office, telegraph office, police thana, large bazaar, good water from tin and wells. Nearest steamer station Kokharul 10 miles reached by railway, running twice a day.
Kakojan	10	326	There is an inspection bungalow. Water is obtainable from the Kakojan stream and from a well. Country provisions are available from shops and the village. Nearest post office Teok 4 miles. Nearest telegraph office Nakharai, 8 miles. There is another district branch post office at Chowkhat near Veling Bridge on Ladoigarth Ali 31 miles from the inspection bungalow.
Jhanzi River	9	335	There is an inspection bungalow a <i>serai</i> and a post office. Water is obtainable from the Jhanzi River. The Jhanzi is not fordable and is crossed by a self acting ferry <i>mu</i> . Supplies are scanty. There is a small shop and a village. The nearest telegraph office is Seleng 7 miles. Nearest steamer station Dikhumukh 15 miles. There is a charitable dispensary at Jhanzi.
Gurnisagar	8	343	There is an inspection bungalow and a post office. Good water is obtainable from a tank close to the inspection bungalow. Country provisions from shop and village. The nearest steamer station is Dikhumukh 9 miles.
SIBSAGAR	7 + <sup>1</sup> by branch road	350	Sadr station of the district. The River Dikhu 1 mile west of Sibsagar is not fordable but is crossed by a self acting ferry. Steamer station Desangmukh 9 miles.
Dimu	12	362	There is an inspection bungalow and a <i>serai</i> . Water is obtainable from the Dimu River close to inspection bungalow. The nearest combined post and telegraph office is Rajmai 3 miles. The River Disang, 6 miles west of Dimu is not fordable but is crossed by a self acting ferry.



## THE ASSAM TRUNK ROAD—Continued.

Name of Stage	Length of Stage, Miles	Total Distance from Dibruti, Miles	Remarks
Dehing River	9	371	Crossed by an iron ferry <i>mar</i> . The <i>seaz</i> and inspection bungalow are on the west bank. No supplies are procurable there is an inspection bungalow in the 10th mile, but no supplies are procurable. The nearest post office is at Barbarua, within 3½ miles of Dibrugarh. The Sessa River is crossed in the 16th mile from Dibrugarh by a temporary wooden bridge.
Lepethatta	10½	381½	
DIBRUGARH	9½	391	
Insukia	30	421	Sadr station, dak bungalow, etc. The Assam Railways and Trading Company's railway station is about a mile from the post office. The inspection bungalow is on the bank of a large tank, and the <i>seaz</i> at the railway station. Supplies are procurable. There is a post and money order office, railway telegraph office, and a weekly <i>hat</i> on Sunday.
Dum Duma	14	435	The Dibruti River is crossed here by a bridge. The <i>seaz</i> is at the <i>hat</i> . There are several shops, also a market, inspection bungalow, thana post and money-order office, telegraph office, and blockhouse. Good drinking water is obtainable from a masonry well near the blockhouse, and a weekly <i>hat</i> on Sunday.
Talap	7	442	This is the terminus of the Dibruti-Sadiya Railway. There is an inspection bungalow, <i>seaz</i> , post and money order office, and railway telegraph office. Good drinking water is obtainable from a masonry well near the inspection bungalow. Supplies are procurable from shop close by.
Saikhwaghat	8½	450½	Inspection bungalow on the south bank of the Brahmaputra, which is crossed here by a ferry. Supplies procurable from shops. No post office. During the rainy season the telegraph office is shifted here from Sadiya.
SADIYA	5½	456	This is a military station on the north bank of the Brahmaputra, which has to be crossed by the ferry at Saikhwa. There is a police thana post and money order office, telegraph office and bazaar. In the runs the telegraph office is located on the left bank of the River Sikhwahat. There is an inspection bungalow.

MAP OF THE ASSAM TRUNK ROAD

## BURMA.

Burma is well worth a visit from any tourist, but the time has not yet arrived for the foreign motorist. It is true there are many cars in Rangoon—some 200—and a few excellent repair and outfit shops, but motoring is practically confined to the town itself and its immediate surroundings. Here it is decidedly good, and there are several attractive drives, such as those through the cantonments and round the Victoria and Royal Lakes. From 15 to 20 miles can be covered along picturesque and often shady thoroughfares, frequently skirted by excellent residences and well-tended gardens, which give the impression of considerable prosperity.

Burma is, however, a land where road construction is difficult and costly, owing to the entire absence of stones near the sea; and directly the thoroughfares leave the cities they show an obvious tendency to relapse into an unmetalled and often rough condition. Thus, there exists a road to Prome, about 160 miles away, but it certainly needs courage to traverse it with a car. Excursions are, of course, possible in some of the other cities, and the motor-car is certain one day to prosper in Mandalay, where there are immensely long and wide streets, laid out for the most part on the American pattern. Still, the inducement to traverse the outskirts of any of these cities is certainly not worth the trouble of bringing over a car specially. In case of need it is fairly easy to hire one. A good firm to apply to for information and guidance is Messrs. Rowe and Co., Fytche Square, Rangoon. In some other places tyres are sold—for instance, at Mandalay, Moulmein, and Bassein, the second-named city being a really pretty place, with very interesting remains and pagodas in the vicinity. In each town, too,

petrol can be obtained, but not much else, save the usual outfit of the average cycle shop. Lower Burma, too, is not particularly attractive from the scenic standpoint, and it is subject to exceptionally heavy rains, which cause the surface of all roads to break up rapidly.

Access to Burma from India is by the British India line, either from Madras (once a week) or Calcutta (thrice a week). The boats are good and fairly comfortable, but are often slow, the journey lasting several days. The excellent Bibby Line steamers touch at Colombo, however, on their way to Rangoon.

Seasons: December and January, cool; February, March, April, and November, dry and hot; May, June, July, August, September, and October, rainy.

## CEYLON.

There are some 600 miles of agreeable motoring possible in Ceylon, and it will occupy about a week. A motorist can either take his own car, or he can hire one without any difficulty from Messrs. Walker, Sons and Co., of Colombo. The island is full of good roads, which extend from Jaffna on the north to Galle on the extreme south, to Trincomalee on the east, and to Puttalam on the west. Much the two most interesting excursions from Colombo are to the ruined city of Anuradhapura, which possesses some of the most wonderful dagobas in the world, and to Kandy, the capital of the ancient dynasty.

The roads are not very wide, but they are fairly well kept up, and they often traverse most wonderful tropical scenery. In places the gradients are very severe, there being a considerable rise—for instance, from Colombo to Kandy. Further on, from Kandy to Nuwara Eliya, there is a very stiff climb, with zigzag gradients of 1 in 10 to 1 in 14, the final elevation being about 6,240 feet above the sea. Care, consequently, is needed in driving, more particularly as the large Ceylon carts are capable of blocking the road entirely at awkward moments. The climate is very agreeable, the temperature never being very excessive. Some parts of the country are, however, rather addicted to fever, and therefore any stoppage in them must be carefully avoided.

Petrol can be easily obtained almost anywhere, and there is good accommodation at all the chief resorts.

Some of the short runs around Colombo are very interesting, notably to Mount Lavinia, on the coast; but the motorist who does not go inland will obtain not the remotest idea of the real nature of the country and the people.

The accompanying map gives an admirable idea of the best roads, from which the motorist can map his tours as he thinks fit. It is published by the courtesy of the P. and O. Company.

Cars can be sent across from Colombo to Tuticorin, in Southern India, by the British India steamers. Neither the embarking nor the disembarking of the cars is an easy process, as in each harbour it is effected by lighters, and Tuticorin is an open roadstead. There is not much good motoring round Tuticorin; it is best to entrain the car for Trichinopoly or Madras.

ROAD MAP OF CEYLON.

## APPENDIX A

## INDIAN CUSTOMS DUTIES

THE following are the rules which have been framed by the Government of India, regarding the exemption of passengers' baggage from Customs duty :

1. The *bonâ-fide* baggage of a passenger is exempt from duty when it accompanies him, does not form part of the cargo, and is not included in the manifest.
2. *Bona-fide* baggage shall include wearing apparel and personal effects, provided that the articles are not for sale, and are imported for the personal use of the passenger or for the use of members of his family travelling with him, but it shall not include the following articles, on which duty must be paid in all cases :
  - (a) Arms and ammunition, and all other articles enumerated in Schedule II. of the Tariff Import Schedule
  - (b) Alcoholic liquors exceeding two quarts, perfumed spirit exceeding one quart, and all other articles enumerated in Schedule III.
  - (c) Cigars and cigarettes exceeding 100 in number, whether in opened or unopened boxes, and other tobacco exceeding 1 pound in weight.
  - (d) Pianos, pianolas, carriages, motor-cars, and motor-cycles.
  - (e) Articles for household use, such as furniture, pictures, carpets, glass, crockery, cutlery, and silver and plated ware, except such articles

(other than furniture or carpets) as shall appear to the Customs Authorities to be imported in a moderate quantity, and to be required for the personal use of the passenger whilst travelling or immediately upon his arrival at his destination.

3. Notwithstanding anything to the contrary in Rule 1, *bonâ-fide* baggage landed at any Customs port within one month before or after the arrival of a passenger in India may, subject to the exceptions specified in Rule 2, be passed free at the discretion of the Collector of Customs.

When firearms bear any marks, such as the maker's name and a number by which they can be identified, such marks should be noted against the articles. Omission to give details in the case of firearms frequently results in the levy of duty a second time.

Apart from books, which are free, and wines and spirits, which are dutiable according to strength and nature, an *ad valorem* duty of 5 per cent. is charged on all articles. The value of these goods includes the difference of exchange and the cost of importation.



## APPENDIX B

APPENDED is a list of the agents of the chief tyre companies trading in India

## THE DUNLOP.

BOMBAY :	Bombay Cycle and Motor Agency, Hornby Road Hill, Sawyer and Co., Meadow Street Mr. A. Heyland, Gowalia, Tank Road Govindjee, Madhowjo and Co., Hum- mun Street.
CALCUTTA :	The Dunlop Pneumatic Tyre Com- pany, Ltd., 14, Clive Street. Continental Electric Company, 47, Bentinck Street. Ashworth, Taylor and Co., Chow- ringhee.
MADRAS :	Oakes and Co., Ltd., Mount Road. Simpson and Co., Mount Road. Addison and Co, Mount Road. Indian Cycle and General Engineer- ing Company, Ltd., Mount Road.
KARACHI :	The Indian Motor-Car Manufacturing Company.
POONA :	F. B. Stewart and Son, 1, Sholapur Road. N. Mehta and Co., East Street.
BANGALORE :	Indian Cycle and General Engineer- ing Company, Stafford House. W. Davis and Co., South Parade.
MEERUT :	Kalloo, Mall and Sons, Sudder Bazaar.
NAGPUR :	Dhunnaram Hiralal Hansapuri Mo- holla.

LAHORE :	Motor and Cycle Agency.
RAWAL PINDI :	Mr. J. S. Evans. The Punjab Motor Transport Com- pany, Ltd., The Mall.
DELHI :	Pearey Lal and Sons.
CAWNPORE :	Byramjee Framjee and Co.
LUCKNOW :	The Oriental Motor Company.
OOTACAMUND :	Oakes and Co., Assembly Rooms.
RANGOON :	G. Mackenzie and Co., Pagoda Road. Burmah Motor and Electrical Com- pany.
COLOMBO :	Walker, Sons and Co., Ltd.
SINGAPORE :	Syme and Co.
PENANG :	Guthrie and Co., Ltd.

## THE CONTINENTAL.

CALCUTTA :	Schroder, Schmidt and Co.
BOMBAY :	Schroder, Schmidt and Co.
MADRAS :	South Indian Export Company.
RANGOON :	J. L. Backofen and Co.

## PALMER.

BOMBAY :	The Western India Motor Co , Ram- part Row.
CALCUTTA :	Messrs. Ashworth, Taylor and Co. 7, Council House. The India Rubber Co., Ltd., 1, Fairlie Place.

## MICHELIN.

CALCUTTA :	The Russa Engineering Works. Messrs. Ashworth, Taylor and Co., 1, Council House Street. Indian Motors, Ltd., 1, Hastings Street.
------------	--

238      *INDIA FOR THE MOTORIST*

- MADRAS :      Messrs. Oakes and Co., Ltd., Post  
                    Box 24.  
                    Messrs. Addison and Co.
- BOMBAY :      The Western India Motor Company,  
                    Rampart Row.  
                    The Bombay Cycle and Motor  
                    Agency, York Buildings, Hornby  
                    Road.  
                    The Dadiba Merwanjee Dalal Asiatic  
                    Auto - Commercial Syndicate, 1,  
                    Marine Lines.  
                    The Bombay Motor-Car Co., 11,  
                    Elphinstone Circle.
- POONA :      Messrs. F. B. Stewart and Son.
- COLOMBO :      Messrs. Lewis, Brown and Co.

## APPENDIX C

THE motorist should always in advance secure a quotation from any hotel for board and lodging inclusive. As a type, three actual bills are appended. There were three in the party, two being ladies, and the stay was limited to a day in the case of Delhi and Agra, and to two days at Ootacamund. It may be added the tips came to little more than a rupee and a half in each case:

## HOTEL DELHI.

	<i>Rupees. Annas.</i>	
Board and Lodging, at Rs. 5 per each per day ... ..	15	0
EXTRAS:		
3 Quarts beer ... ..	3	0
1 Pint claret ... ..	1	10
2 Gingers ... ..	0	6
1 Lemon squash ... ..	0	4
2 Sodas ... ..	0	4
Ice ... ..	1	0
4 Punkah coolies at 8 annas each ... ..	2	0
Total ... ..	23	8

## HOTEL OOTACAMUND.

	<i>Rupees. Annas.</i>	
To hotel charges—a gentleman and two ladies—at Rs. 22 per day, from 18th to 20th, two days ... ..	44	0
To two coolies with letters ... ..	1	0
To 1 bottle Beaune ... ..	2	8
To 2 ginger beers, 8 annas; 1 bottle cider, Rs. 1.4 ... ..	1	12
To one coolie—House ... ..	0	4
To one coolie sent for tonga ... ..	0	2
Total ... ..	49	10

## HOTEL AGRA

		<i>Rupees</i>	<i>Annas.</i>
13th.	Dinner, Rs. 6	6	0
	Ice, 6 annas; ginger, 4 annas, lemon, 4 annas	0	14
	Peg, 10 annas	0	10
	Phaeton hire, Rs. 2	2	0
14th	Board and lodging up to tiffin	9	0
	Ice, 12 annas	0	12
	Phaeton hire, including stable	6	0
	2 Lemon squashes, 8 annas	0	8
	3 Gingers, 12 annas 2 sodas, 4 annas	1	0
	Total	26	12

There is usually a slight charge for housing a car  
but it is never excessive

## APPENDIX D

DIRTY linen is washed at so much a piece, irrespective of size or quality. The native works solely on this system, which is one not unfavourable to the traveller. The price varies, but is usually two annas per piece if the number of articles is small, or a little more than one anna each if the number is large. Roughly, it may be often taken at Rs 8 per 100.

All linen should be most carefully counted and checked on being sent to the wash; but this is even less important than examining it on its return, since the native is by no means particular, provided the number is correct, as to the exact type of article he includes. Thus, one collar to him is often the same as any other collar.

Generally speaking, the arrangements in India for washing clothes are excellent, prompt delivery is certain, and promises can usually be relied on.

## APPENDIX E

THE official table of the mileages over the Grand Trunk Route from Fort William, Calcutta, to Peshawar, issued in 1900, is herewith appended. It differs in one or two cases slightly, but in an unimportant fashion, from Mrs. Lloyd's figures, due partly to slight shortening of the routes, due also to the different reckoning of the point of start. The spelling of the names is also official, and in this connection it should be remembered that many Indian place-names can be spelt in six or more different ways.

<i>Places.</i>	<i>Mileage.</i>	<i>Places.</i>	<i>Mileage.</i>
Kotrung ... ..	9 $\frac{1}{2}$	Chorparan ... ..	261 $\frac{1}{2}$
Gaurhati ... ..	20	Baluwa ... ..	271 $\frac{1}{2}$
Hooghly ... ..	28 $\frac{1}{2}$	Sarwa ... ..	282 $\frac{1}{2}$
Digsui (Taragani) ...	36 $\frac{1}{2}$	Sherghati ... ..	295
Goara ... ..	48 $\frac{1}{2}$	Madanpur ... ..	309 $\frac{1}{2}$
Dulla Bazar ... ..	62 $\frac{1}{2}$	Aurangabad ... ..	323 $\frac{1}{2}$
Burdwan ... ..	74 $\frac{3}{4}$	Barun ... ..	337 $\frac{1}{2}$
Sarul ... ..	86 $\frac{1}{2}$	Dehri ... ..	340 $\frac{1}{2}$
Bud-Bud ... ..	98 $\frac{1}{2}$	Sasaram ... ..	352 $\frac{1}{2}$
Gopalpur ... ..	109 $\frac{3}{4}$	Jehanabad ... ..	368
Ondal ... ..	121 $\frac{1}{2}$	Mohania ... ..	381 $\frac{3}{4}$
Bogra ... ..	133 $\frac{1}{2}$	Khajura ... ..	395 $\frac{3}{4}$
Asansol ... ..	139 $\frac{3}{4}$	Jagdis-Ki-Sarai ...	406 $\frac{1}{2}$
Niamatpur ... ..	145 $\frac{3}{4}$	Jalilpur ... ..	418 $\frac{3}{4}$
Nirsa ... ..	157 $\frac{1}{2}$	Benares ... ..	425
Gobindpur ... ..	170 $\frac{1}{2}$	Raja-ka-Talao ...	435
Rajganj ... ..	182 $\frac{1}{2}$	Maharajganj (Katka)	451
Topchanchi ... ..	191 $\frac{1}{2}$	Gopiganj ... ..	462
Dumri ... ..	205 $\frac{1}{2}$	Baraut ... ..	474
Bagodar ... ..	217	Saidabad ... ..	484
Atka ... ..	224	Jhusi ... ..	497 $\frac{3}{4}$
Burkata ... ..	233	Allahabad ... ..	503 $\frac{1}{2}$
Barhi ... ..	249	Mufti-Ke-Purwa ...	513 $\frac{1}{2}$

## APPENDIX E

243

<i>Places.</i>	<i>Mileage.</i>	<i>Places.</i>	<i>Mileage.</i>
Kohkhiraj ...	527 $\frac{1}{4}$	Ughana ...	1,045 $\frac{3}{4}$
Saini ...	541	Bara ...	1,057 $\frac{1}{4}$
Katoghan ...	554	Khanna ...	1,067 $\frac{1}{4}$
Thariyaon ...	566 $\frac{1}{4}$	Doraha ...	1,081 $\frac{1}{4}$
Fatehpur ...	578 $\frac{3}{4}$	Ludhiana ...	1,094 $\frac{1}{4}$
Malwa ...	589 $\frac{3}{4}$	Phillour ...	1,104 $\frac{1}{4}$
Aung ...	602 $\frac{1}{4}$	Phagwara ...	1,117 $\frac{1}{4}$
Maharajpur ...	617 $\frac{1}{4}$	Jullundur ...	1,129 $\frac{1}{2}$
Cawnpore ...	628 $\frac{1}{4}$	Katarpur ...	1,142
Kalianpur ...	636 $\frac{1}{4}$	Girana ...	1,150
Chaubepur ...	645 $\frac{1}{2}$	Raya ...	1,159
Pura ...	657 $\frac{1}{2}$	Jandiala ...	1,171
Araul ...	671	Amritsar ...	1,182 $\frac{3}{4}$
Sarai Miran ...	680 $\frac{1}{2}$	Gharenda ...	1,194 $\frac{1}{4}$
Gursahaiganj ...	696	Chabil ...	1,206 $\frac{1}{4}$
Chhibramau ...	711	Lahore ...	1,216 $\frac{1}{2}$
Bewar ...	724 $\frac{1}{2}$	Shahdara ...	1,219
Sultanganj ...	738 $\frac{1}{2}$	Muridke ...	1,231 $\frac{1}{2}$
Kuraoli ...	747 $\frac{1}{4}$	Kamoke ...	1,244
Malawan ...	758 $\frac{1}{2}$	Gujranwala ...	1,255 $\frac{1}{2}$
Etah ...	770 $\frac{1}{2}$	Ghakkhar ...	1,266
Bhadwas ...	781 $\frac{1}{2}$	Wazirabad ...	1,276 $\frac{1}{4}$
Sikandra Rao ...	790 $\frac{1}{2}$	Kathala ...	1,280 $\frac{1}{4}$
Akrabad ...	801	Gujrat ...	1,286 $\frac{1}{4}$
Aligarh ...	815 $\frac{1}{4}$	Lala-Musa ...	1,296 $\frac{1}{4}$
Somna ...	828 $\frac{1}{2}$	Kharian ...	1,305 $\frac{1}{4}$
Khurja ...	843	Aurangabad ...	1,314 $\frac{1}{4}$
Bhur (near Bulandshahr)	855	Jhelum ...	1,318 $\frac{1}{2}$
Sicundarabad ...	864 $\frac{1}{2}$	Dina ...	1,330 $\frac{1}{2}$
Dadri ...	876	Sohawa ...	1,344 $\frac{1}{2}$
Ghaziabad ...	887	Gujar Khan ...	1,356
Delhi ...	901 $\frac{1}{4}$	Mandra ...	1,365
Alipur ...	912 $\frac{3}{4}$	Riwal ...	1,374 $\frac{1}{2}$
Rai ...	922 $\frac{3}{4}$	Rawal Pindi ...	1,384 $\frac{1}{2}$
Larsauli ...	933 $\frac{1}{4}$	Jani-Ki-Sang ...	1,399 $\frac{1}{2}$
Sanbhalkha ...	944 $\frac{1}{4}$	I Hassan-Abdal ...	1,414 $\frac{1}{4}$
Panipat ...	955 $\frac{1}{4}$	Hati ...	1,428
Gharaunda ...	965 $\frac{1}{4}$	Attock Fort ...	1,441 $\frac{1}{2}$
Karnal ...	975 $\frac{1}{4}$	Khairabad ...	1,449 $\frac{1}{2}$
Battana ...	988 $\frac{1}{2}$	Akora ...	1,459
Pipli ...	997 $\frac{1}{2}$	Nowshera ...	1,467 $\frac{1}{2}$
Shahabad ...	1,010 $\frac{1}{4}$	Pubbi ...	1,479
Umballa ...	1,024 $\frac{1}{4}$	Peshawar ...	1,490
Mughal-Ki-Sarai ...	1,034 $\frac{1}{4}$		



## APPENDIX F

## MOTOR ROADS IN RAJPUTANA

RAJPUTANA is an attractive country from the point of view of the tourist, who, however, would need considerable courage to motor very much in it. There are, however, some fairly good roads in the vicinity of Jaipur, and they are indicated on the accompanying map. In the wet weather, however, it is inadvisable to make use of them. Under no circumstances at any time should the motorist leave the roads which are not indicated in black marking on the accompanying chart.

Rajputana is approached from the direction of Agra, along a fairly good road, mostly metalled.

The country is fairly well provided with railways, so that motorists dissatisfied with the surface of the roads can easily move by train into another part of the country.

Motor supplies can be arranged for at Agra.

## MOTOR ROADS IN RAJPUTANA

